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SOLSTICE SUPREME ROV
REDUCED OIL VOLUME

KR-SELVRF
ROV FRYER

Rack Fryer for Kroger
By Pitco

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KROGER RACK FRYER:

- Oil Savings
  - ROV Style Fryer
- Energy Savings
  - Energy Savings Mode
- Volume
  - Fry More per Load on Racks
  - Fry multiple products in one cook cycle

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THE BASICS

The KR-SELVRF units design is for extended oil life and ease of operation / serviceability. Kroger is looking for 21 - 28 days of oil life before the need to discard 100% of the oil in the tank and refill with 100% fresh oil. In order to do this, filtering is more important than ever.

Per Kroger's direction, we have programmed the computer to filter after each cook for fresh product and after three (3) cooks for freezer to fryer products. Never mix and match fresh with frozen products in the same cook.

Filtering during the day after a cook is 100% automatic. No interaction from the employee is necessary unless the system senses something is not in place correctly in order to properly and safely filter.

After the cook has ended, the fryer will drain the oil into the filter pan, pump the oil through the filter media for a programmed time frame, and then return the oil to the fry pot. Once the oil has been returned to the fry pot, the unit will enter an Energy Savings Mode. Oil set temperature at this point is 300°F.

If another cook is needed, press the "thermometer" key prior to preparing any product. This will exit the Energy Savings Mode and allow the unit to heat to a new set temperature of 350°F while the product is prepared.

To put a fryer into an energy savings mode manually, press and hold the thermometer button.

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Filter Pan Assembly:

- Assembly of the filter pan is crucial to proper filter operation.
- Filter paper should be changed out with new paper daily.
- Filter paper should NEVER be allowed to get wet with water. Any paper that gets wet with water should be thrown away and not used (even if dried out after being wet).
- Always completely dry ALL filter pan components prior to assembly.

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Filter Pan Assembly:

- All filter pan components are removable and able to be washed in hot soapy water
- To avoid damage to components, do not use a soak sink or tumble sink or pot washer to wash filter pan components.
- All components must be ***DRY*** when reassembled.

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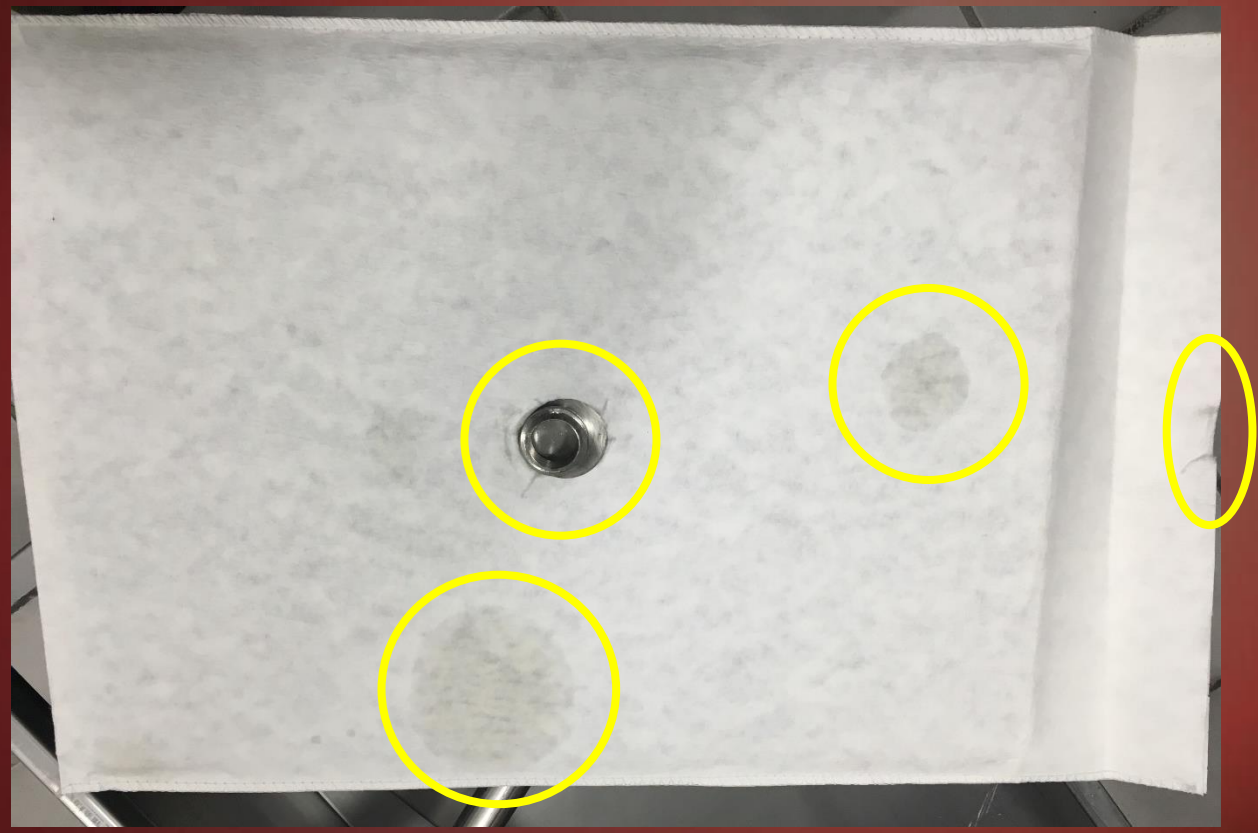
Filter Pan Assembly:

- Once all parts have been properly DRY, slide the metal rack screen into a new filter paper envelope so the threaded fitting on the metal rack matches up with the provided hole in the paper.
- Take care not to rip the paper in any way.
- Yellow circles to the right are to show paper is not dry and has rips. This paper needs to be thrown away and replaced.



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Filter Pan Assembly:

- Fold the open end of the paper envelope over and slide the metal clip over the folded edge.
- Tighten the wingnut assembly on to the threaded metal screen to attach the pickup tube to the filter paper assembly.

Folded Edge

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Filter Pan Assembly:

- Install the assembly into a DRY filter pan as shown to the right.
- Install the crumb catch in the front left corner of the filter pan.
- Slide fully assembled filter pan under the fryer.

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Filter Pan Assembly:

- There is a filter pre-screen in the pick up tube that needs to be checked periodically for debris and proper installation.
- Remove the pre-screen by unscrewing it with your fingers (May be hot. Use appropriate PPE) and check for debris.

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Filter Pan Assembly:

- Check to be sure the white O-ring is in place and seated into the groove.
- If clean and O-ring is there, replace the pre-screen and tighten finger tight.
- If this pre-screen is loose or the O-ring is missing, the pump will suck air instead of oil from the filter pan and the oil will not return to the fry pot to complete the filter process.
- If clogged with debris, it will not allow oil to be pumped through it. Clean and put back.

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Filter Pan Assembly:

- Make sure to swivel the drain spout down into the crumb catch while installing the filter pan under the fryer.
- If the filter pan is installed properly, the fryer door should shut and latch. If the door does not shut and latch, check positioning of the filter pan to make sure it is pushed all the way under the fryer.

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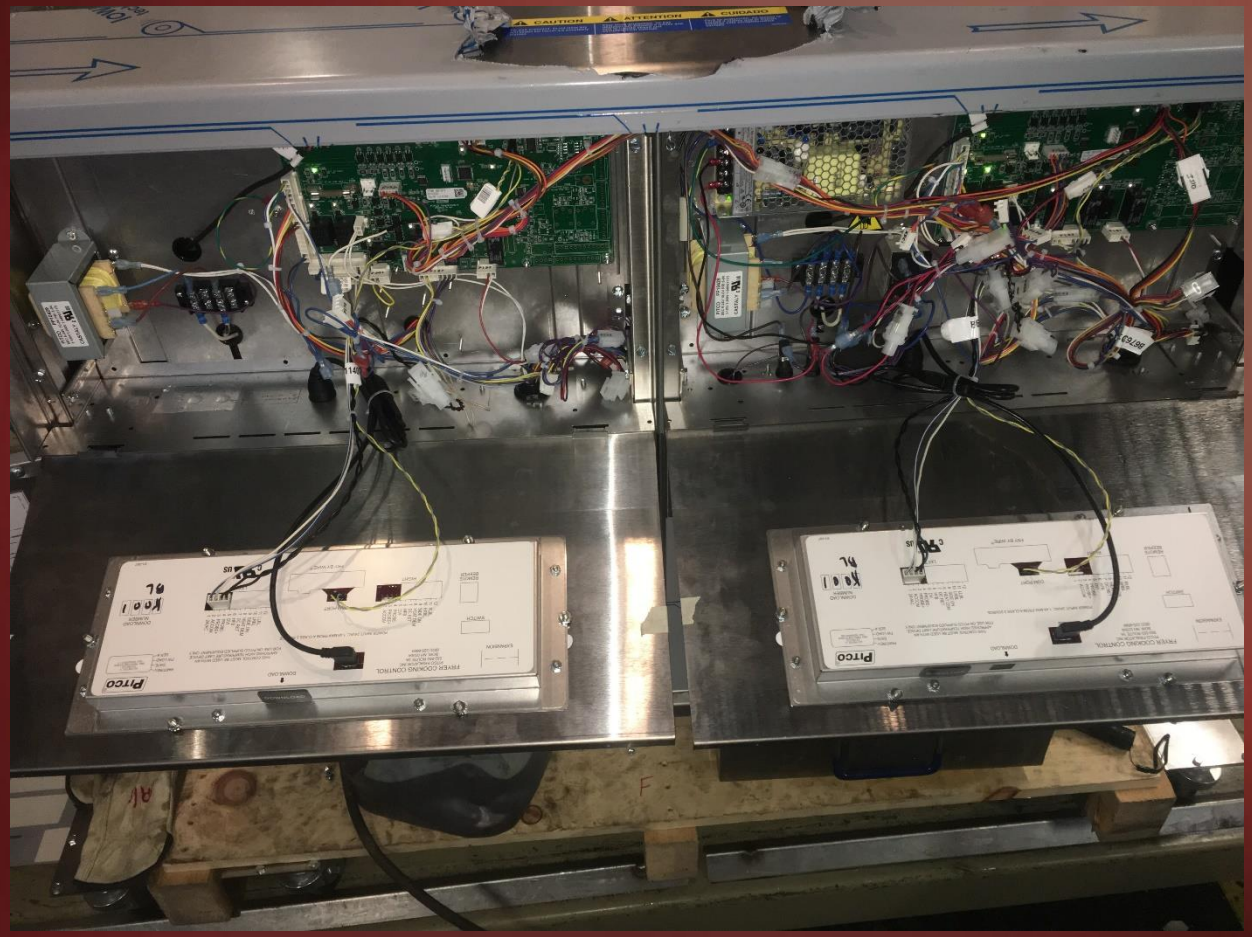
- The Kroger units are either a single or a dual fryer format. The photo at the right shows a dual format.
- Standard two Phillips head screws to lower the panels.
- Easy access to components
- Easily Serviceable



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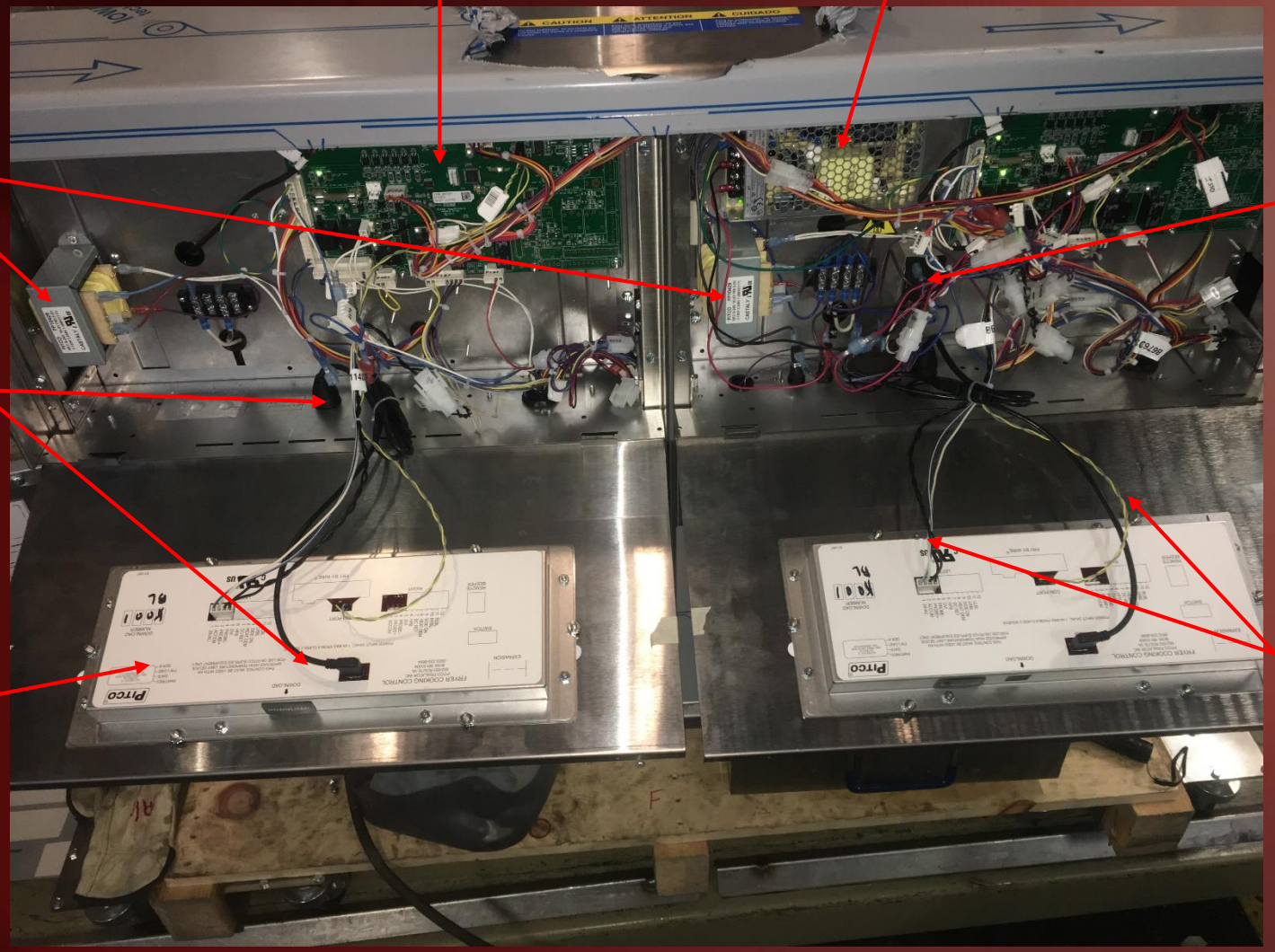
Relay Board -- 60183205
24vdc Power Supply -- 60207301
Transformer – PP10429
Pump Motor Relay -- 60104701
Remote USB Cord -- 60195501
Wire Harness K12 to AFB– B6811401
K12 Computer -- 60198703

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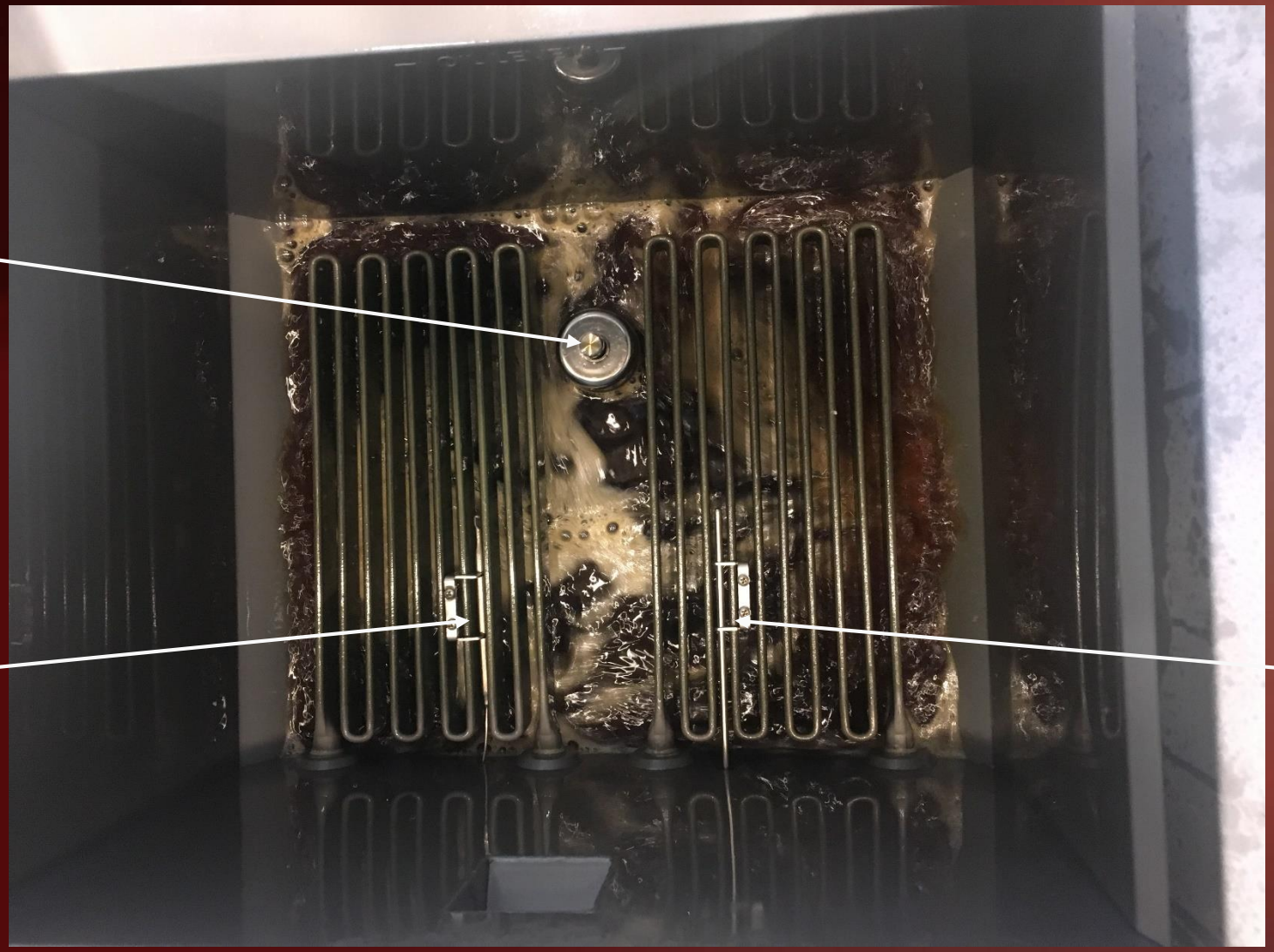
Rear of Fryer



Tank Float Assembly – B5302201-C

Float Only -- P5047217

Retaining Ring Only -- 60143401

Hi Limit – PP10084

Mounting Bracket – B3342002-C

Temperature Probe – 60204401-C

Mounting Bracket – B3342001-C

Front of Fryer

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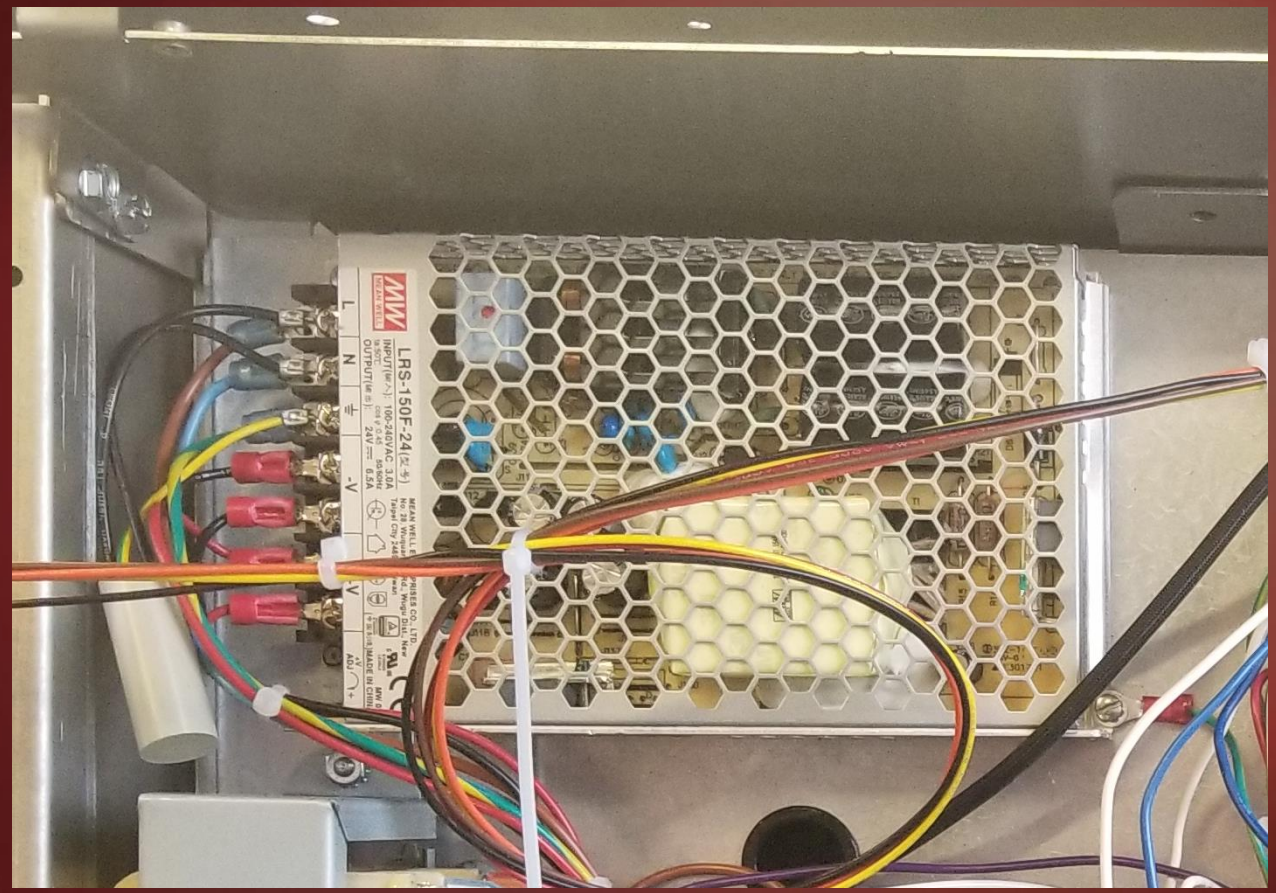
The 24VDC Power supply is located in the right side fryer behind the front panel and is the heart of the system. It supplies the relay board and all valve actuators 24vdc to operate. There is only one power supply per fryer bank.

It is supplied with 208vac, which is fused, and outputs 24vdc to power the multiple valve actuators. The 24vdc output is fused as well.

The power supply is internally protected from overload or internal over temp situations.

For an overload condition, removing the overload will automatically return the operation back to normal.

For an over temp condition, allow to cool and remove input power. Remove input power by cycling line voltage to the equipment.



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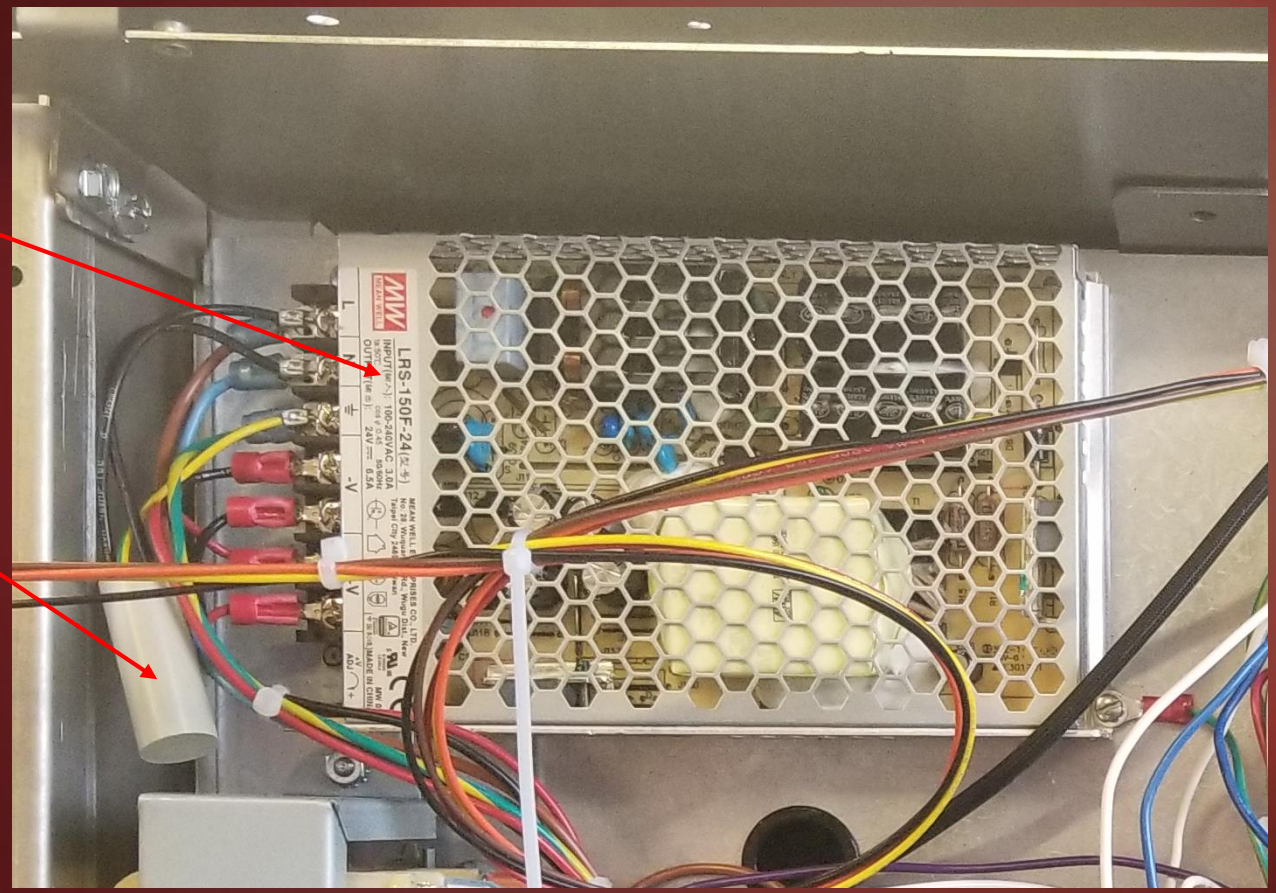
24vdc Power Supply -- 60207301

AC Line Noise Filter – B5336701-C



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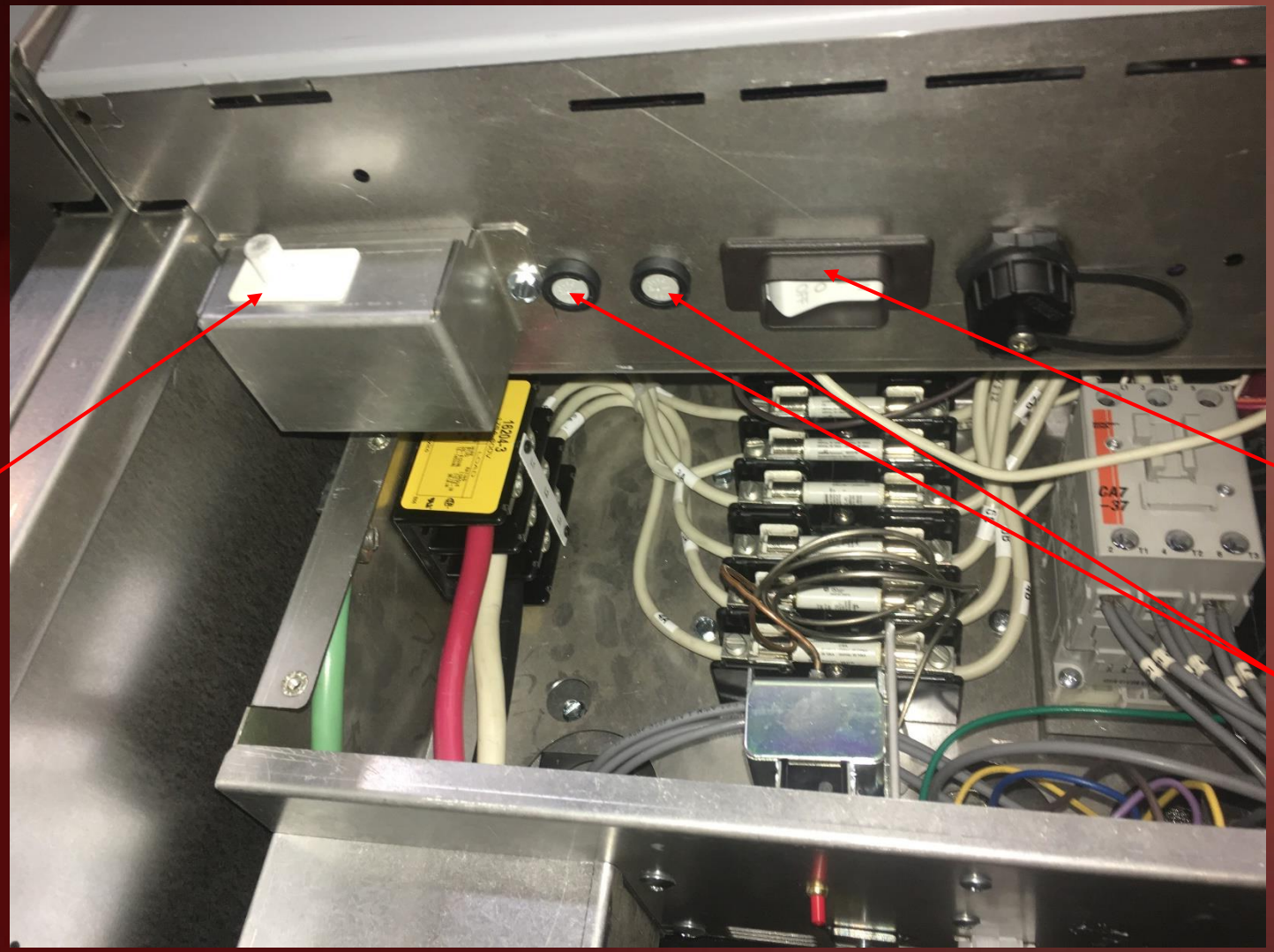

Door Switch – P9101-23

Pump Motor Circuit Breaker Switch -- 60078502

Fuse Holder (each) -- P5045794

LEFT FUSE (VAC) -- 60132705

RIGHT FUSE (VDC) -- 60132706

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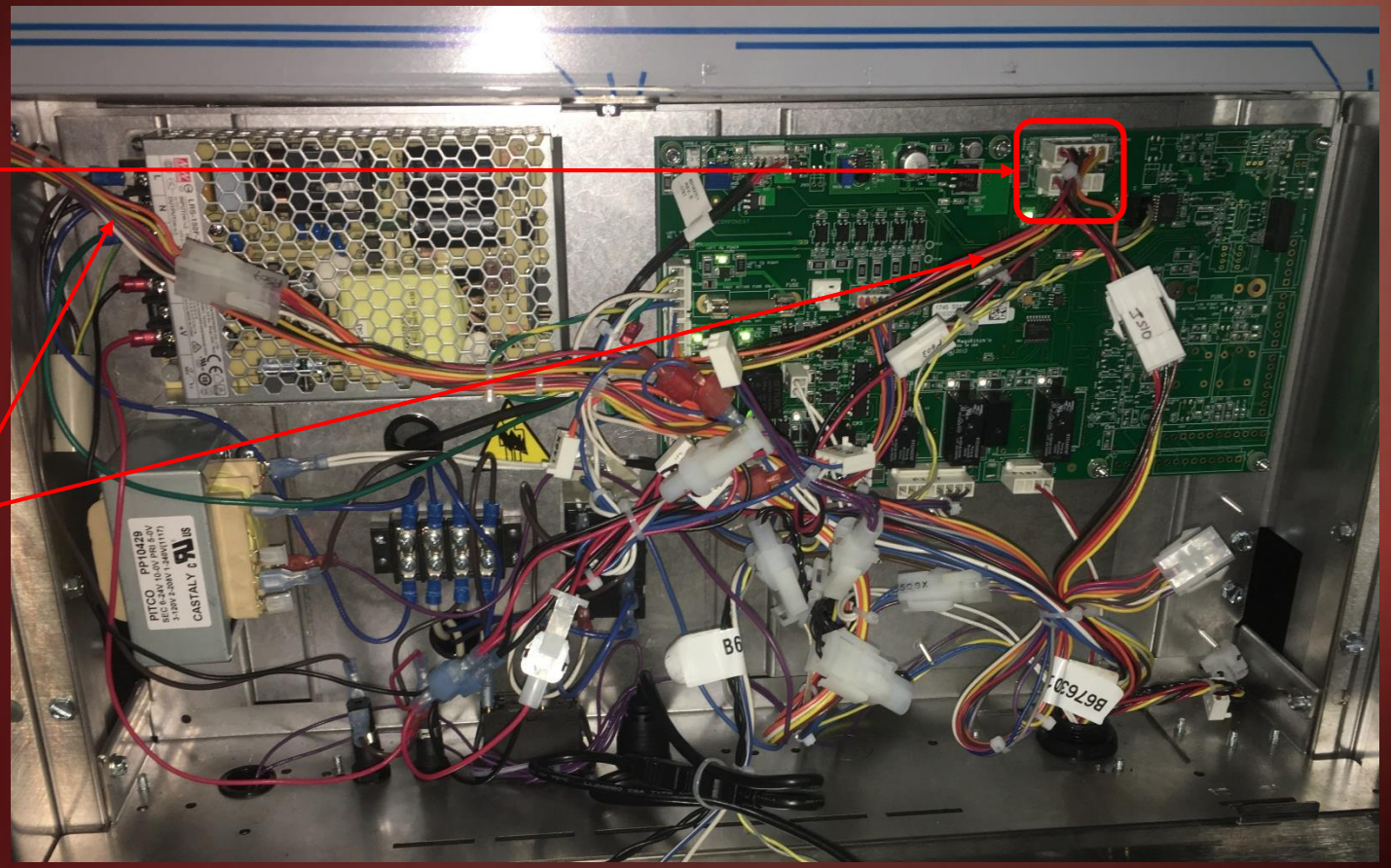
- The Auto Filter Board (AFB) is located behind the front control panel on each fryer. The AFB and computer are in communication with each other at all times.
- The 24vdc power supply connects to the AFB at J138 in the upper center of the AFB

- The 24vdc is a shared resource of both fryers. It is daisy chained to the left fryer by the wire harness located on J139. This wire harness from J139 on the right fryer connects to J138 on the left fryers AFB.



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Flashing **Green** Light is a Status light for the Actuator relays. Repeatedly Flashes Code / Pauses / Flashes Code.

This is the units "heartbeat". If there is a heartbeat, you have 24vdc supplied to the AFB from the power supply. If no heartbeat, check DC power supply and connections to the AFB from power supply and fuses.

All fryer in the bank should be flashing the same code.

8 Different Flashes:

1 Flash = Draining

2 Flash = Filtering

3 Flash = (not currently used)

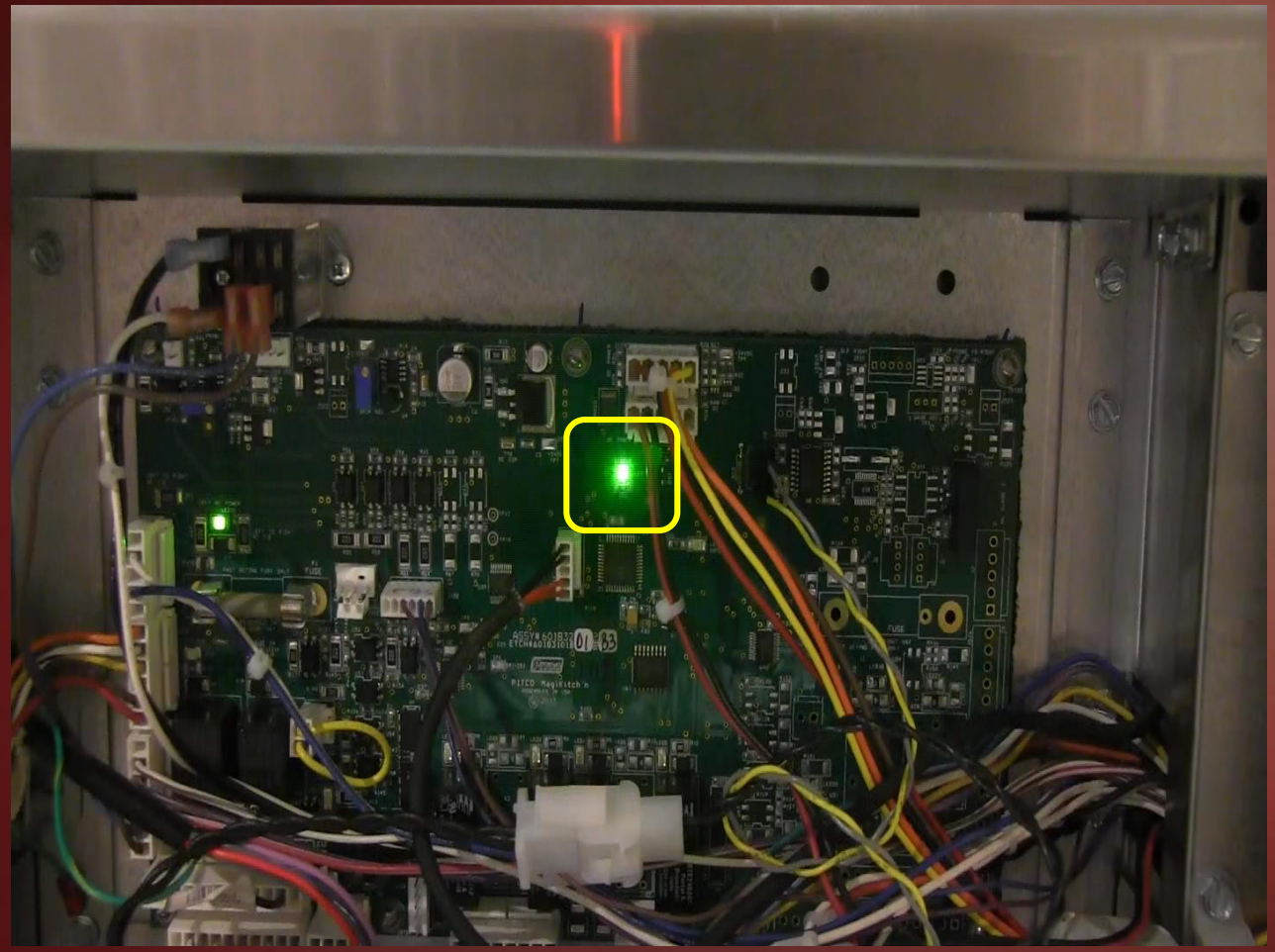
4 Flash = Divert & Pump (Top Off)

5 Flash = None

6 Flash = Waste & Pump (Disposing)

7 Flash = None

8 Flash = Idle (No filtering operations)



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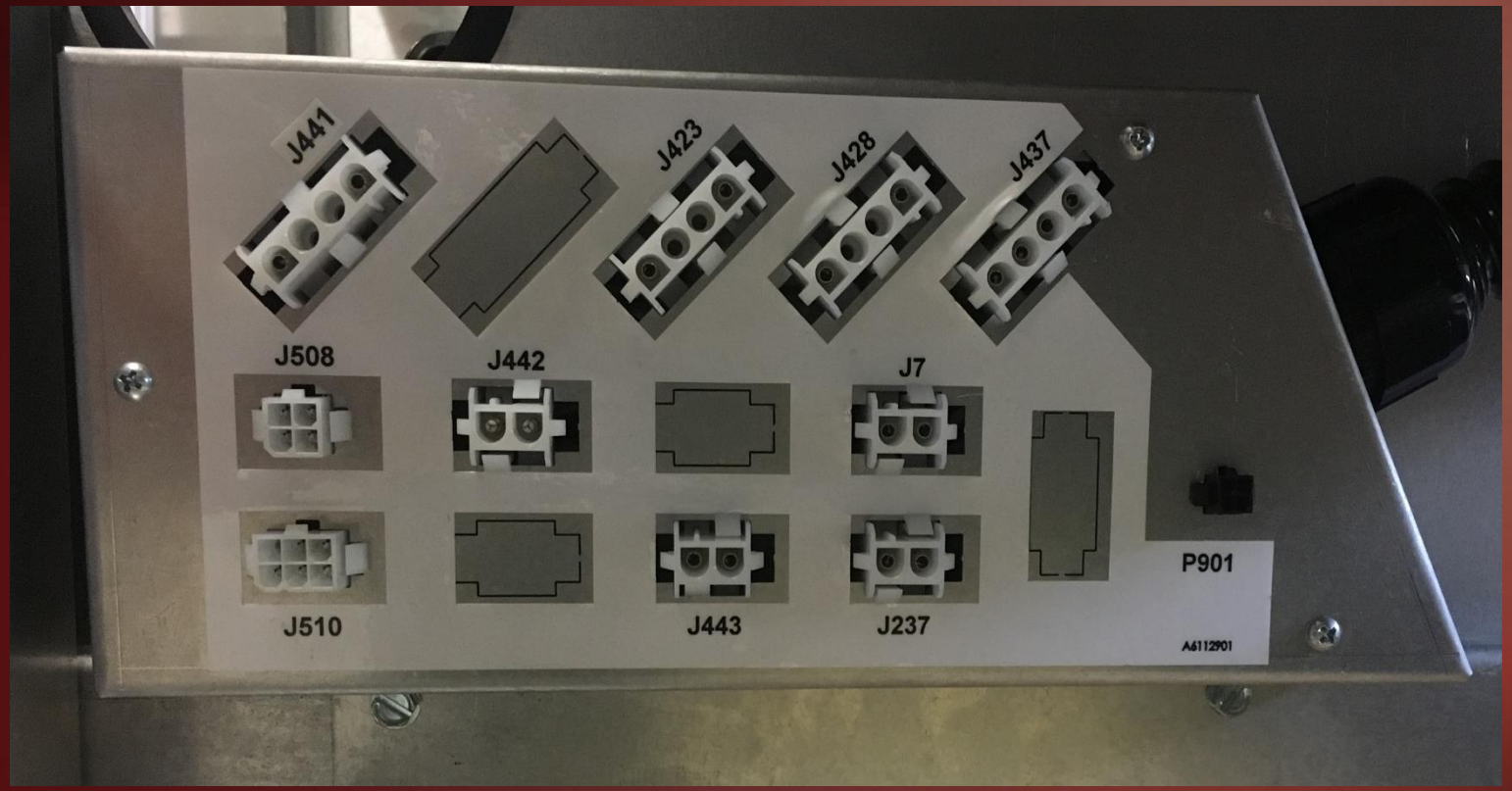
Entrance Box

The Entrance Box is where the controller connects to all of the actuators and switches in the unit. Each fryer has its own entrance box. It is accessible from the front and rear of the unit.

Not all plugs will be used. Make sure to remember which plug you removed and make sure it gets back to the correct receptacle in the entrance box when testing / replacing components.



Entrance box located in right rear of each fryer cabinet

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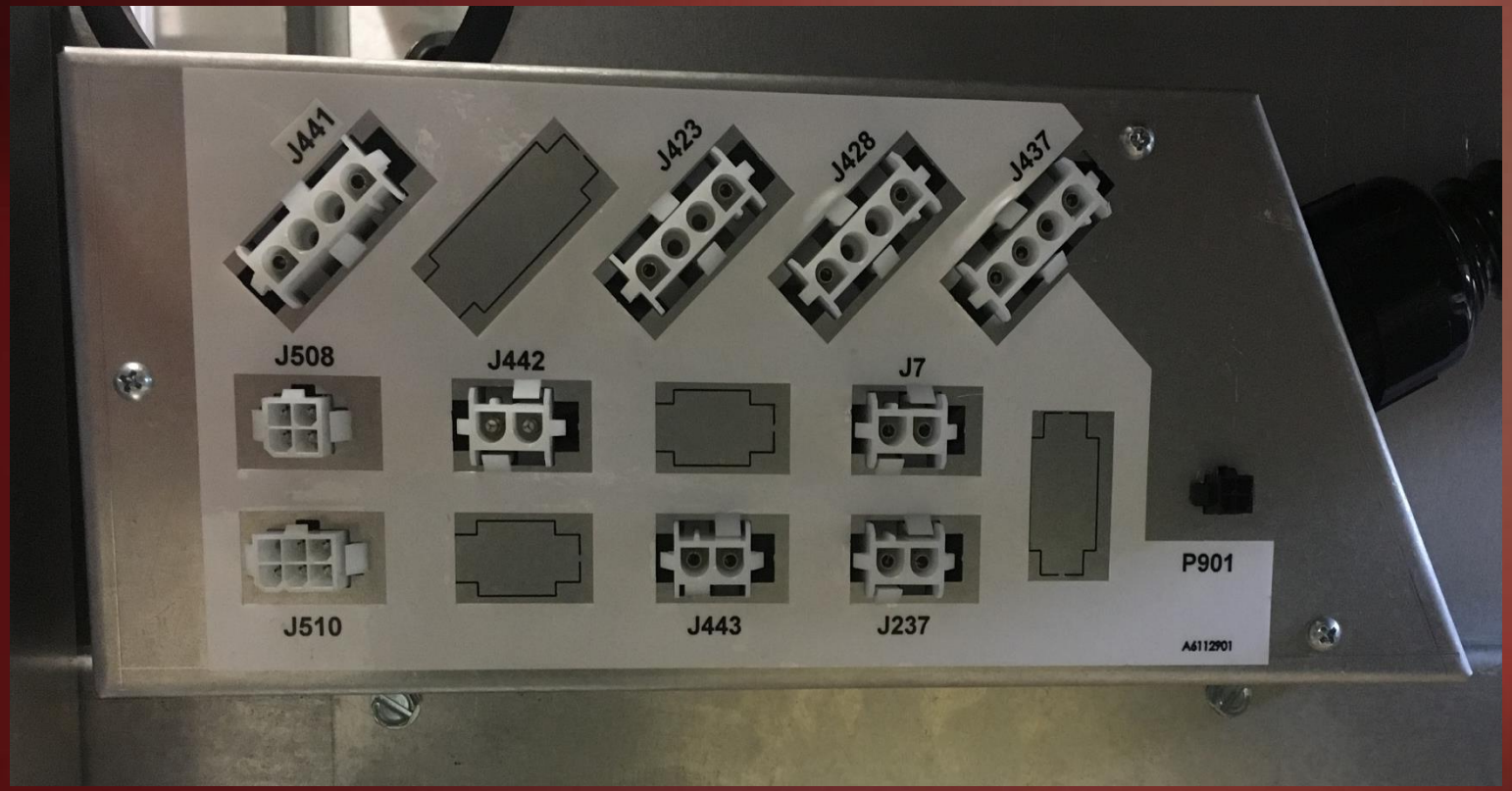
Entrance Box Wiring

J7 = Temperature Probe
J237 = Tank Float Switch
J423 = Divert Actuator
J428 = Return Actuator
J437 = Drain Valve Actuator
J441 = SOS Actuator
J442 = 24VDC (Not used)
J443 = 24VAC (Not Used)
J508 = Filter Pan Switches
J510 = Bulk Oil (if equipped)

P901 = SOS Sensor (if equipped)



Entrance box located in right rear of each fryer cabinet

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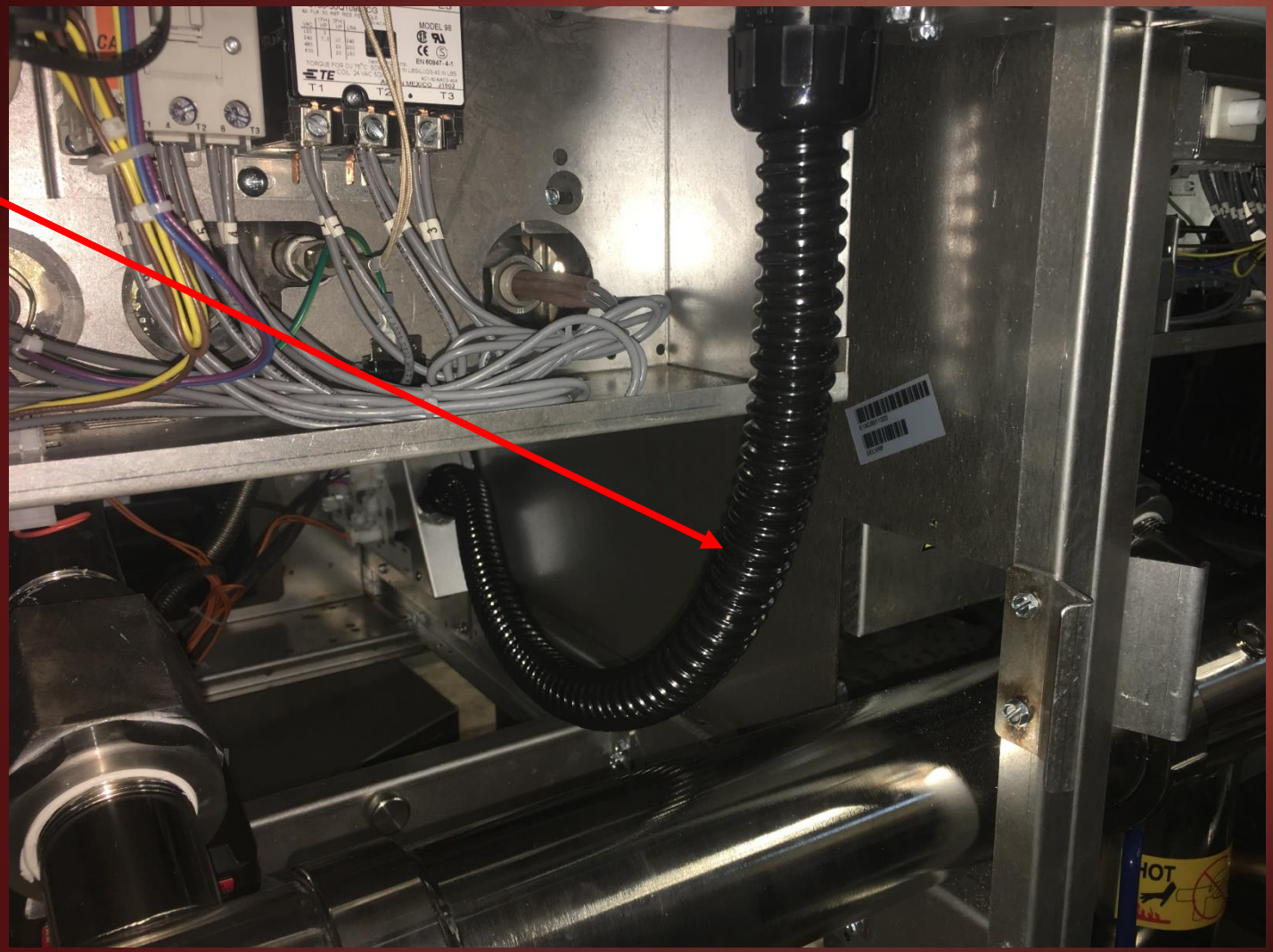
The wiring from the control box to the entrance box is all located in a flexible conduit.



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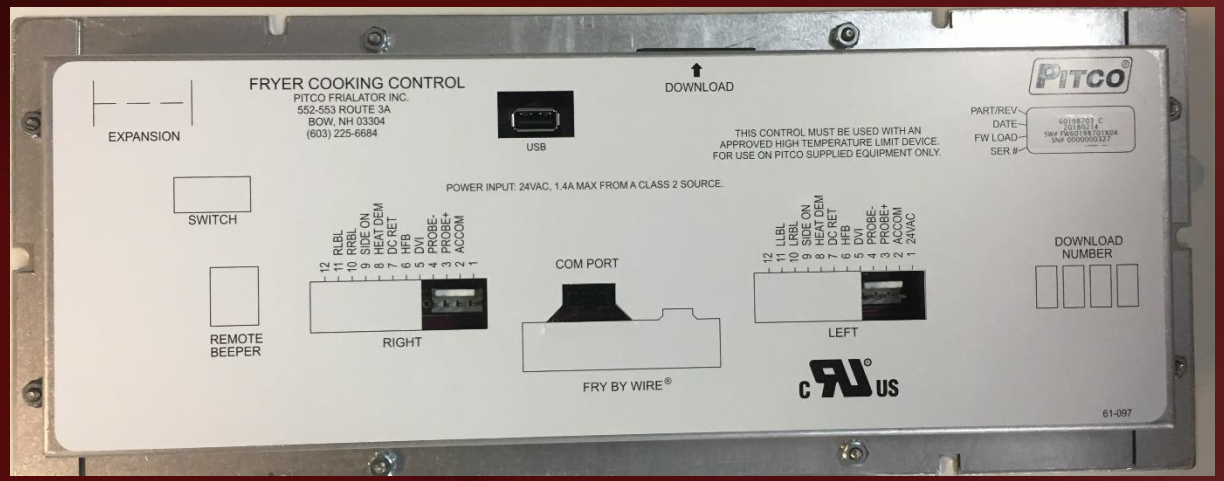
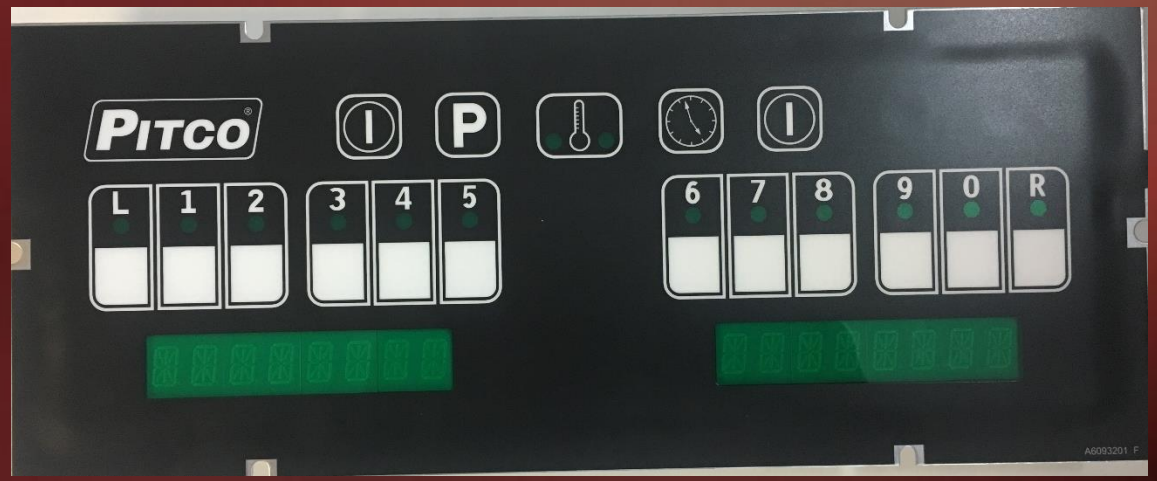
The computer is the K-12 version. P/N is 60198703.

There is a USB connection for uploading / downloading information and to update firmware if needed for future updates.

See literature # L20-455 for full programming and operation of this K-12 computer.





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P/N for Replacement AFB
60183205

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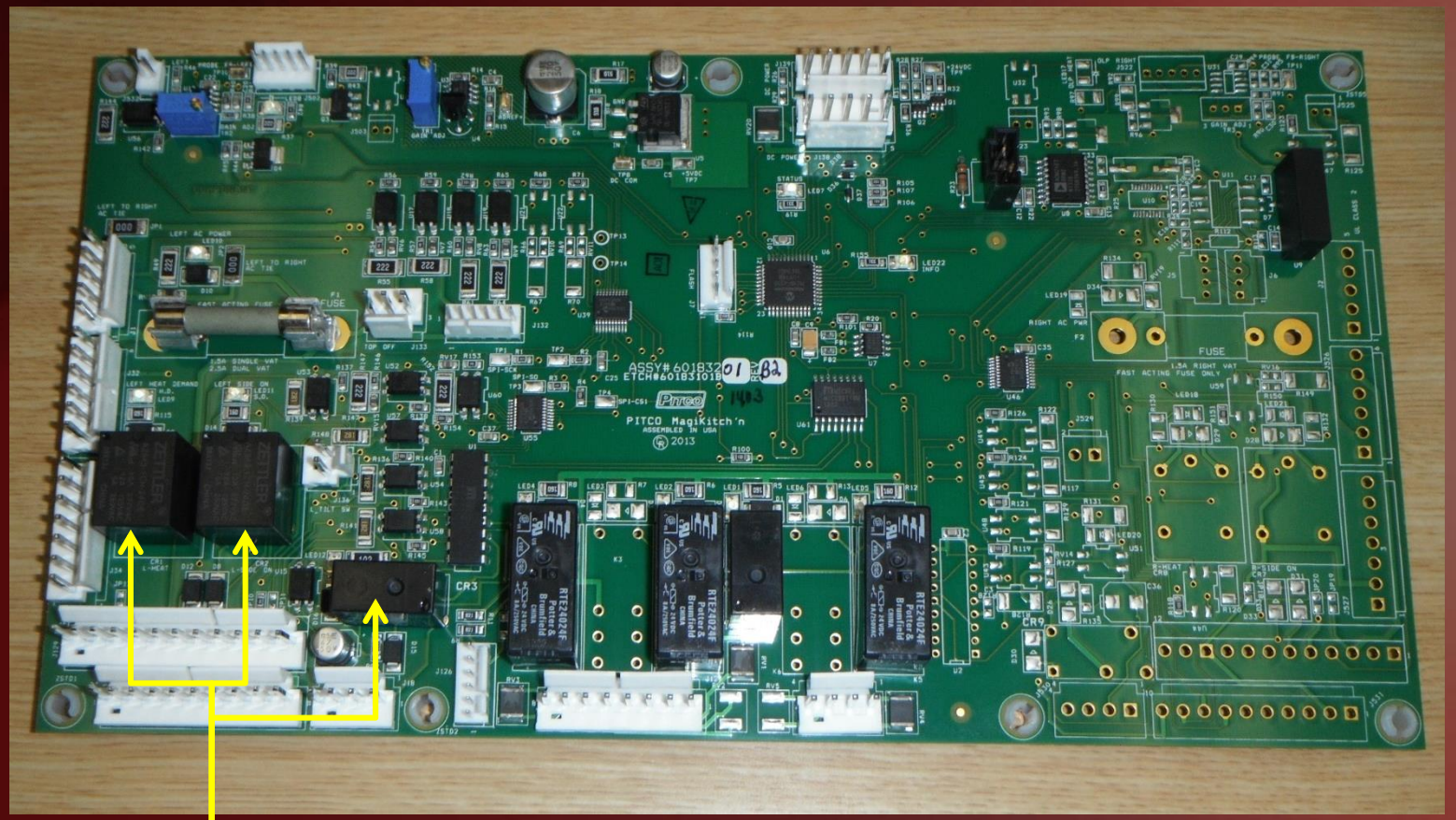

Heat Demand / Side On and
Self Cleaning Burner (SCB)
Relays
CR1, CR2 and CR3

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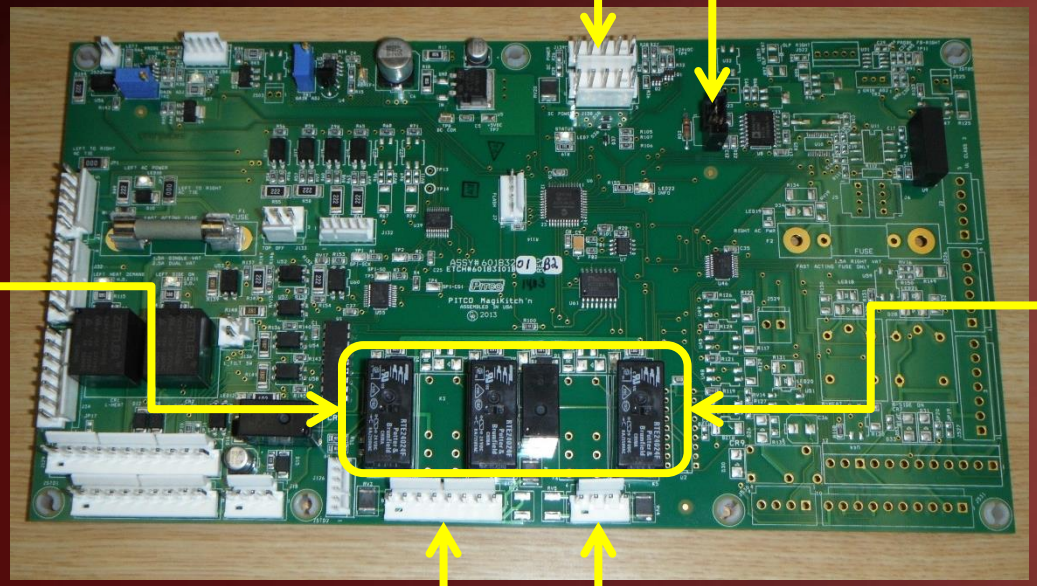
24VDC Input / Jumper
J138 / J139
5 Pin Connectors

Commlink
Yellow / Grey twisted pair
J3



Left to Right

K4 = Pump Divert

K2 = Return

K1 = Pump Run

K5 = Drain

24VDC Relays for Drain, Return and Divert actuators
As well as Pump Run Relay.

Divert / Return Actuators
24VDC +/- Connections

Pump Run Relay = Ohms
J127
8 Pin

24VDC +/-
Drain Valve Actuator
J137
4 Pin

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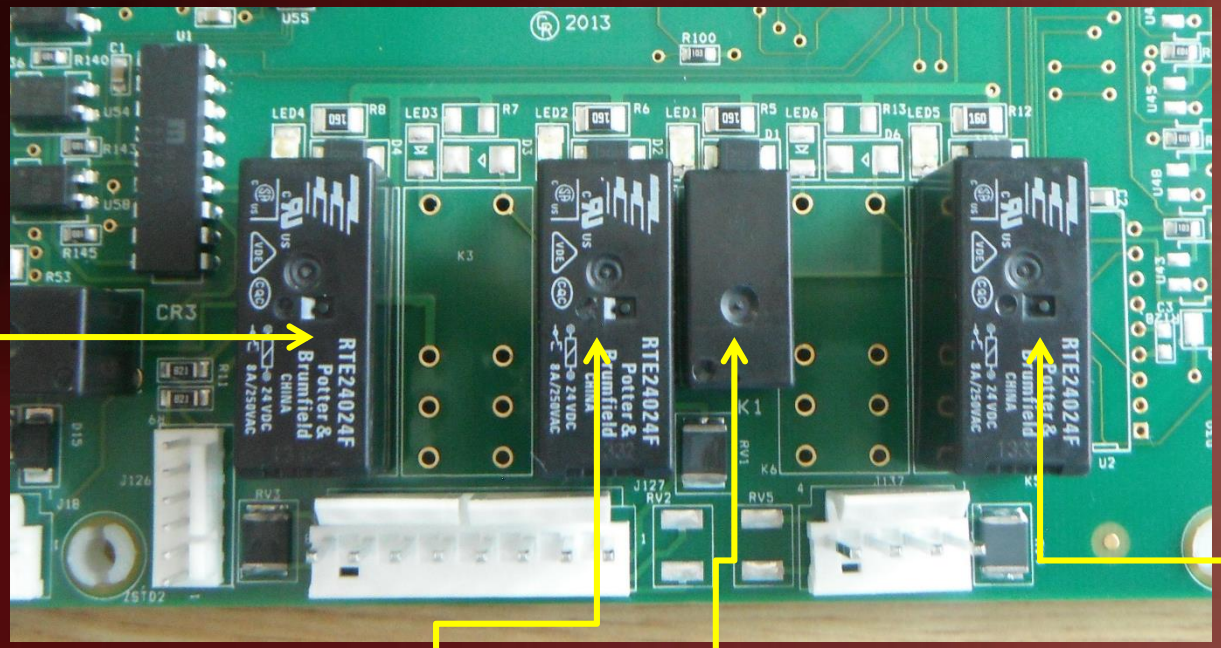

K4 = Pump Divert Valve

K2 = Return Valve

K1 = Pump Run Relay

K5 = Drain Valve

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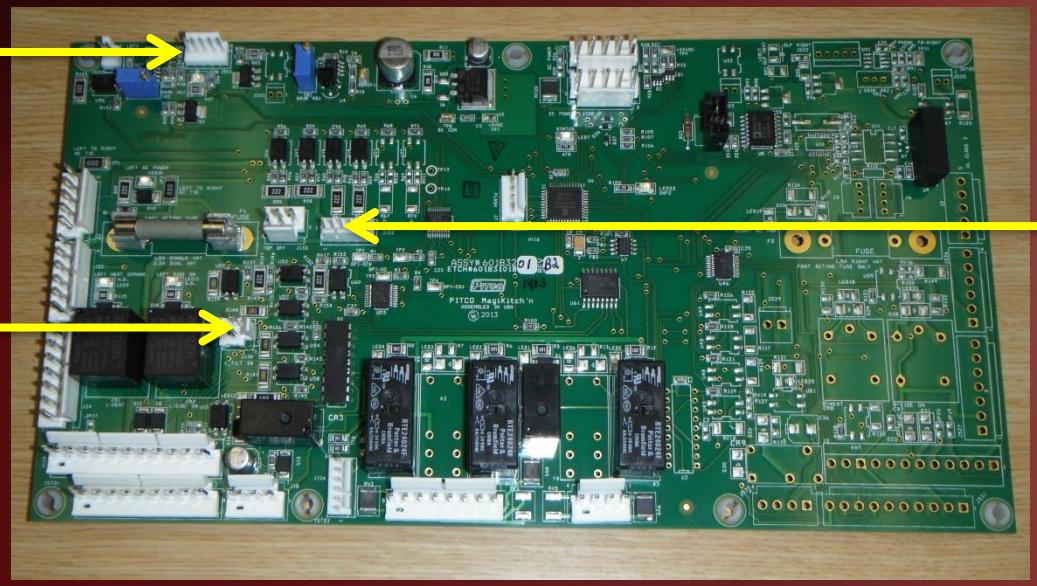
Oil Level Probe (OLP)
J502
5 Pin



Oil Level Float
J136
2 Pin

Pan in Place and Pan Not Empty Switches
J132
6 Pins

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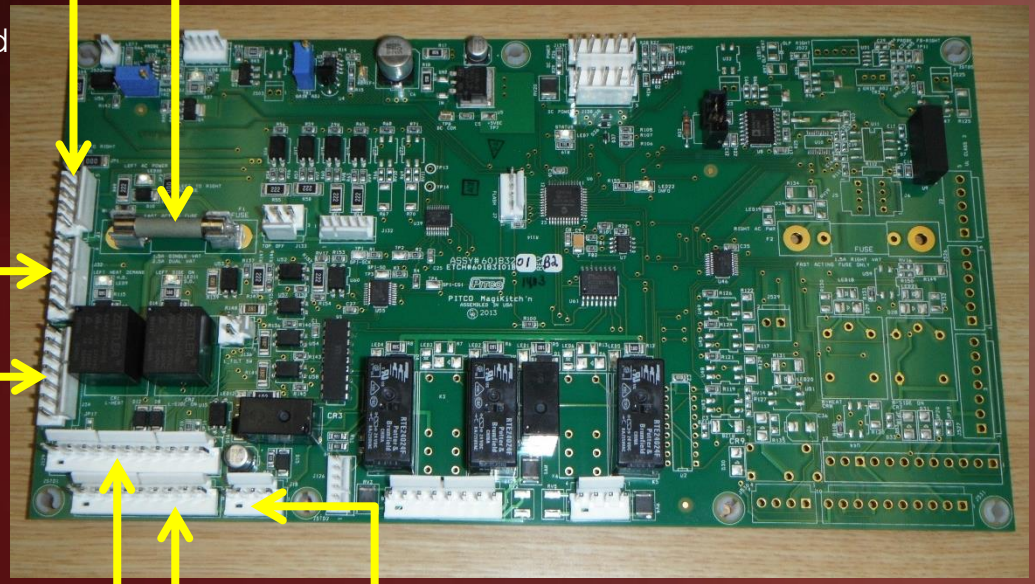
24VAC
J1
5 Pin

2.5A Fast Acting Fuse
F1
P/N 60132703

Side On / Heat Demand
Heat Feedback
J32
6 Pin

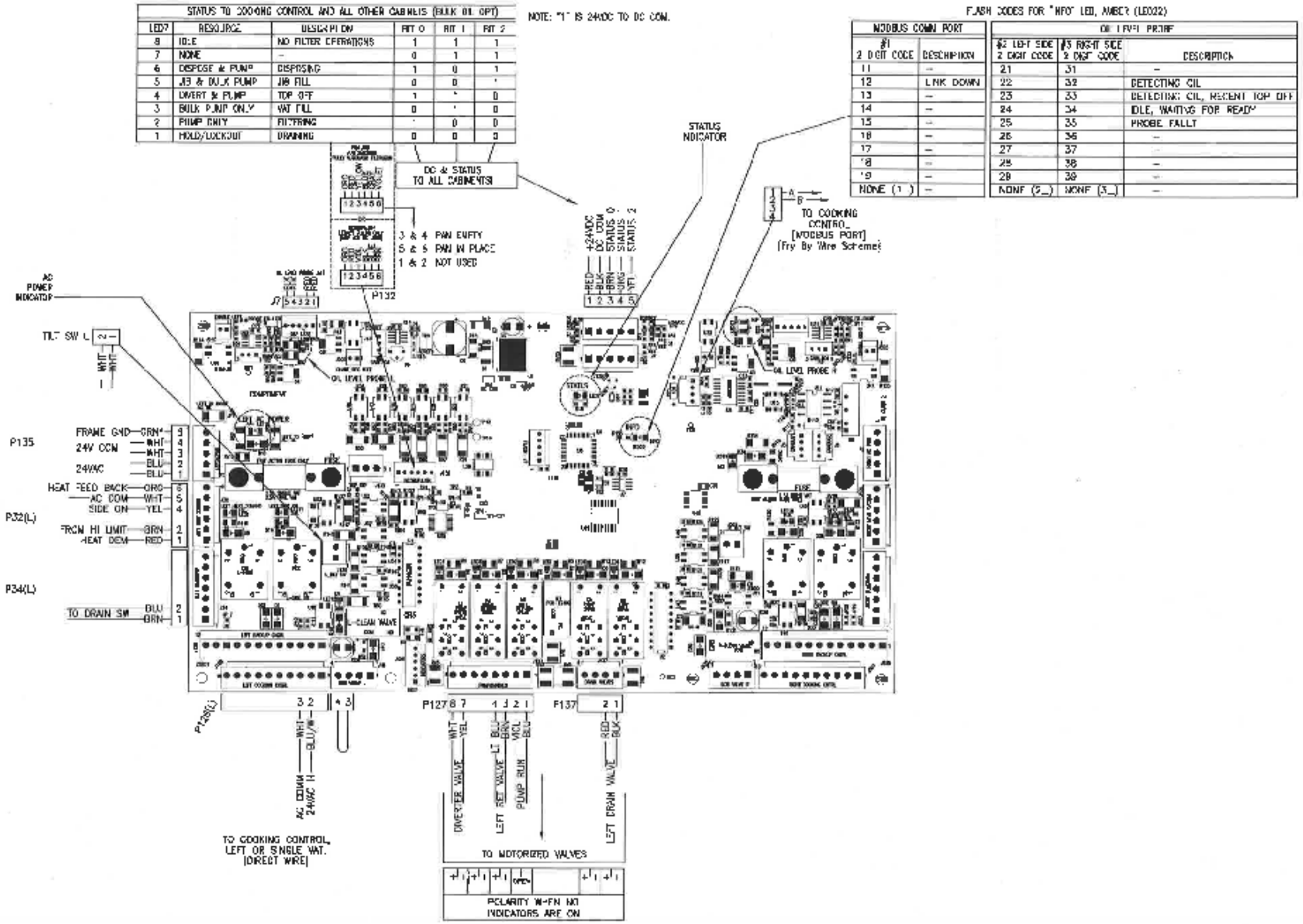


Drain Valve Interlock (DVI)
J34
7 Pin

Jumper for Electric Operation
SCB Roll out for Gas Operation
J18
4 Pin

Use Blue Wire Jumper
p/n B6747001
J129
12 Pin

K-12 Computer Connection
J128
10 Pin



LED?	RESOURCE	DESCRIPTION	BIT 0	BIT 1	BIT 2
8	IDLE	NO FILTER OPERATIONS	1	1	1
7	NONE	–	0	1	1
6	DISPOSE & PUMP	DISPOSING	1	0	1
5	JIB & BULK PUMP	JIB FILL	0	0	1
4	DIVERT & PUMP	TOP OFF	1	1	0
3	BULK PUMP ONLY	VAT FILL	0	1	0
2	PUMP ONLY	FILTERING	1	0	0
1	HOLD/LOCKOUT	DRAINING	0	0	0

#1 2 DIGIT CODE	DESCRIPTION
11	–
12	LINK DOWN
13	–
14	–
15	–
16	–
17	–
18	–
19	–
NONE (1_)	–

#2 LEFT SIDE 2 DIGIT CODE	#3 RIGHT SIDE 2 DIGIT CODE	DESCRIPTION
21	31	–
22	32	DETECTING OIL
23	33	DETECTING OIL, RECENT TOP OFF
24	34	IDLE, WAITING FOR READY
25	35	PROBE FAULT
26	36	–
27	37	–
28	38	–
29	39	–
NONE (2_)	NONE (3_)	–

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The Hi Limit Thermostat is located behind the same electrical panel as the contactors and elements.

Typical Pitco Hi Limit p/n PP10084 and should be standard truck stock.

Perform electrical test with wires removed:

Ω test should be zero - .3Ω for a good hi limit. If Ω value is higher, replace hi limit with a new one. Make sure to note readings of both the new and old hi limit on your warranty paperwork.

Reset button for hi limit presses upwards.

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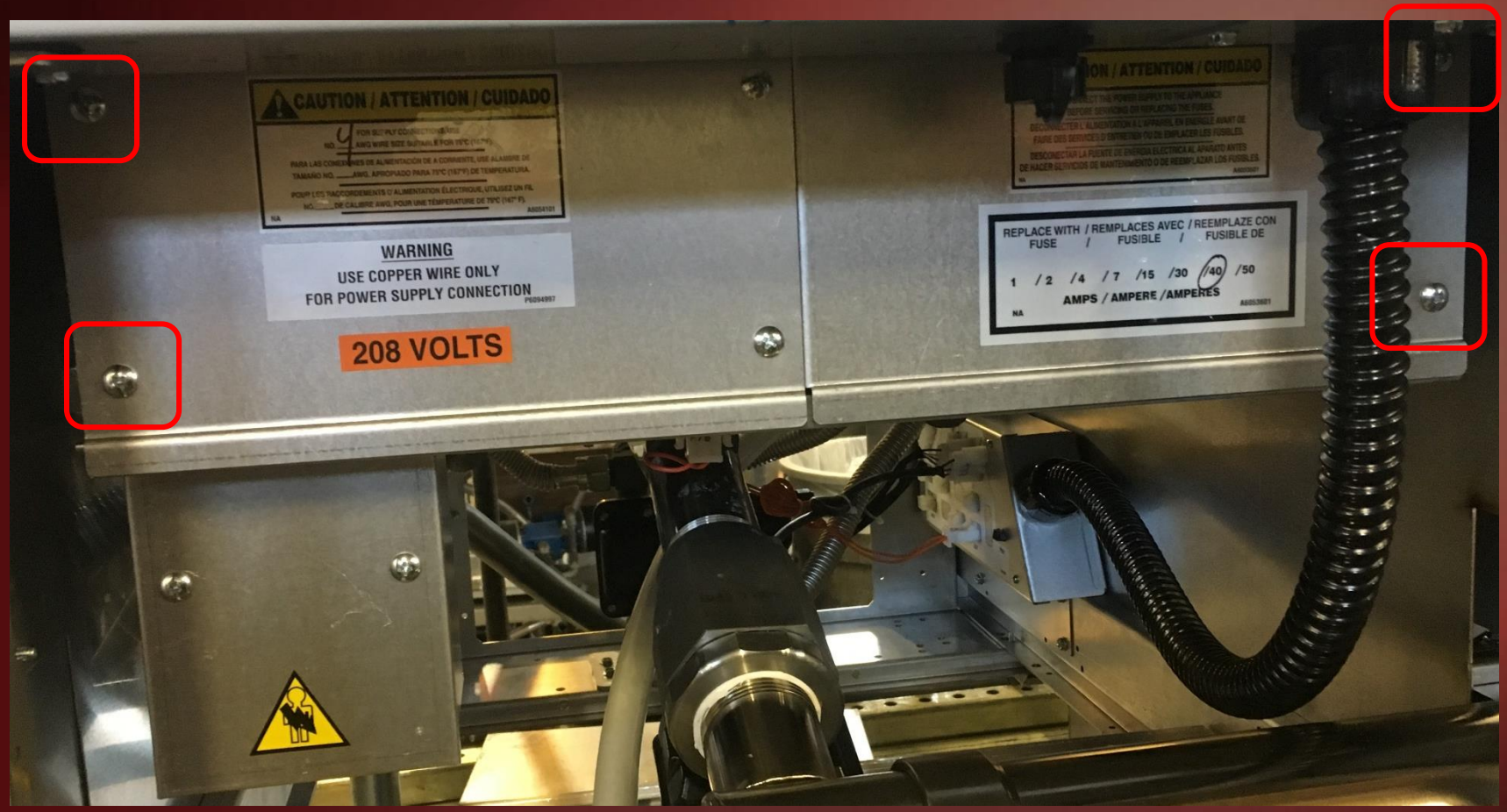
With the door open, a metal panel covers the access to this electrical box. There are two Phillips head screws on each end that hold it in place.

The two screws in the middle hold the two left and right panels together are you can leave those tight unless you only need to remove one of the two panels.


CAUTION / ATTENTION / CUIDADO
WARNING
USE COPPER WIRE ONLY
FOR POWER SUPPLY CONNECTION
208 VOLTS
REPLACE WITH / REMPLACES AVEC / REEMPLAZE CON
FUSE / FUSIBLE / FUSIBLE DE
1 /2 /4 /7 /15 /30 /40 /50
AMPS / AMPERE /AMPERES

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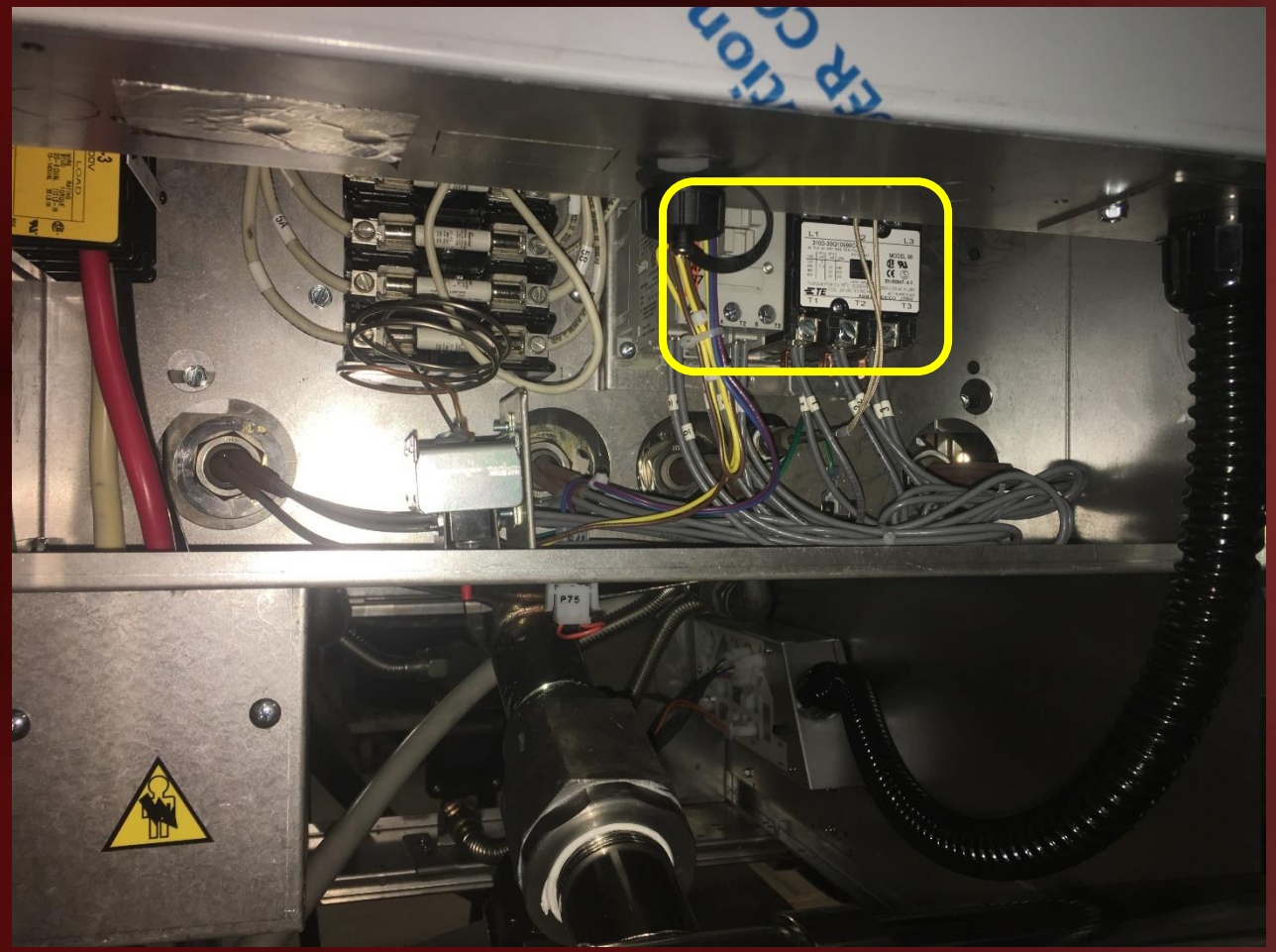

The BLACK contactor is the SIDE ON

The GREY contactor is the HEAT DEMAND.

Side On – 24vac coil should receive power through the hi limit when computer is turned ON. This contactor should stay energized as long as computer is in a MELT, HEATING, or READY state.

Heat Demand – 24vac coil should energize each time the computer calls for heat.

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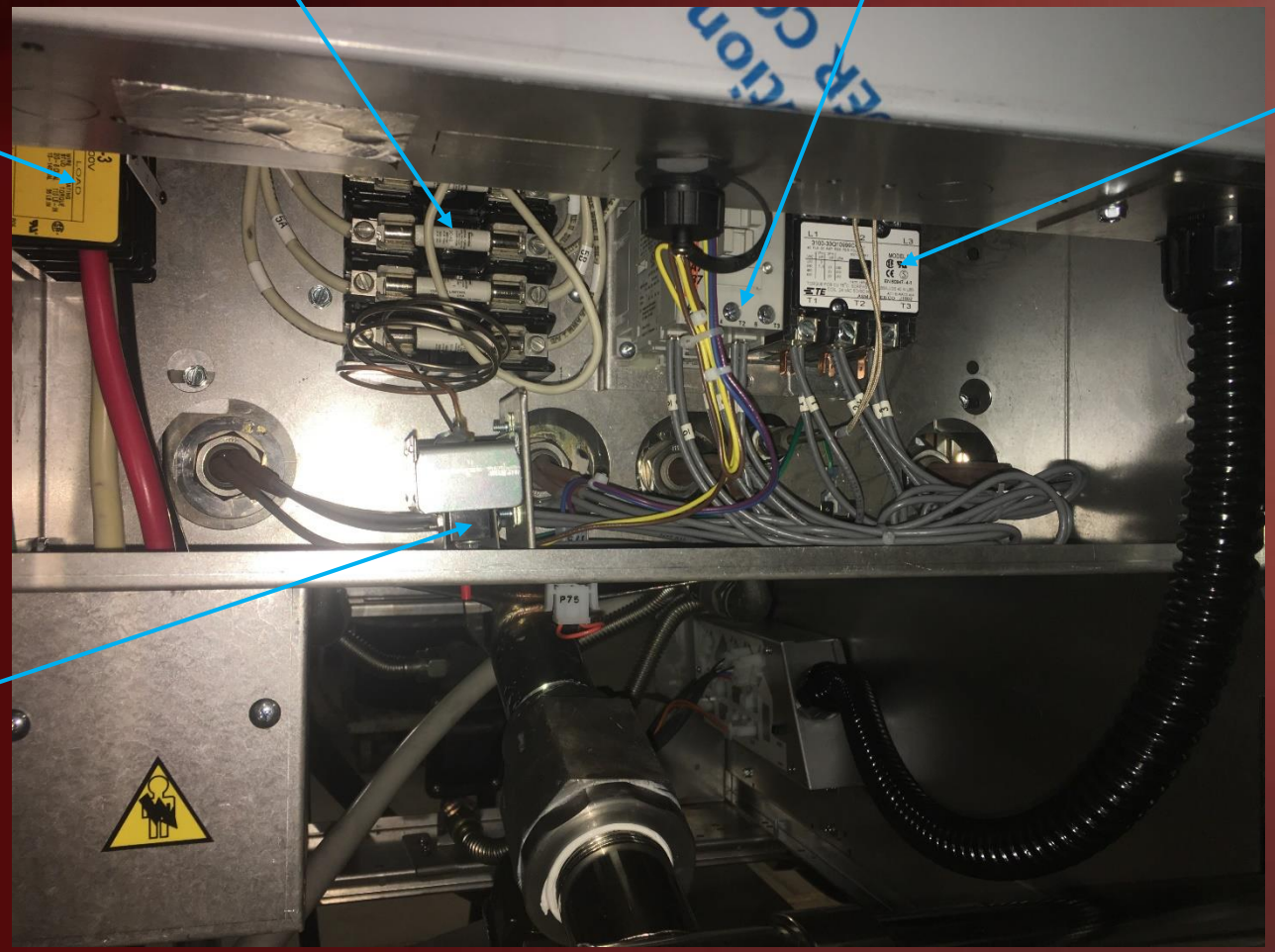
Fuse 40A Slo-Blo – P5045701

Heat Demand Contactor -- 60139201

Terminal Block -- P5047301

Side On Contactor -- 60157202



Hi Limit -- PP10084

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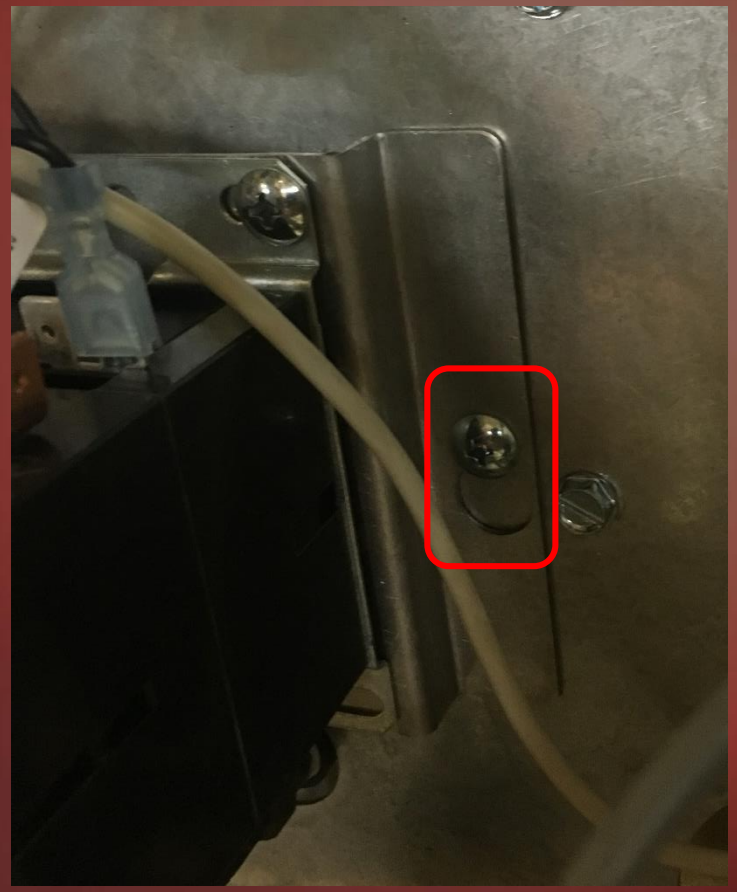
Both contactors are mounted onto a metal plate / heat shield. There are two Phillips head screws on either side of the plate. Loosen these screws and then slide the plate off using the keyholes over the screw heads.

Troubleshoot the contactors or replace them and then reinstall and retighten the mounting bracket / heat shield.



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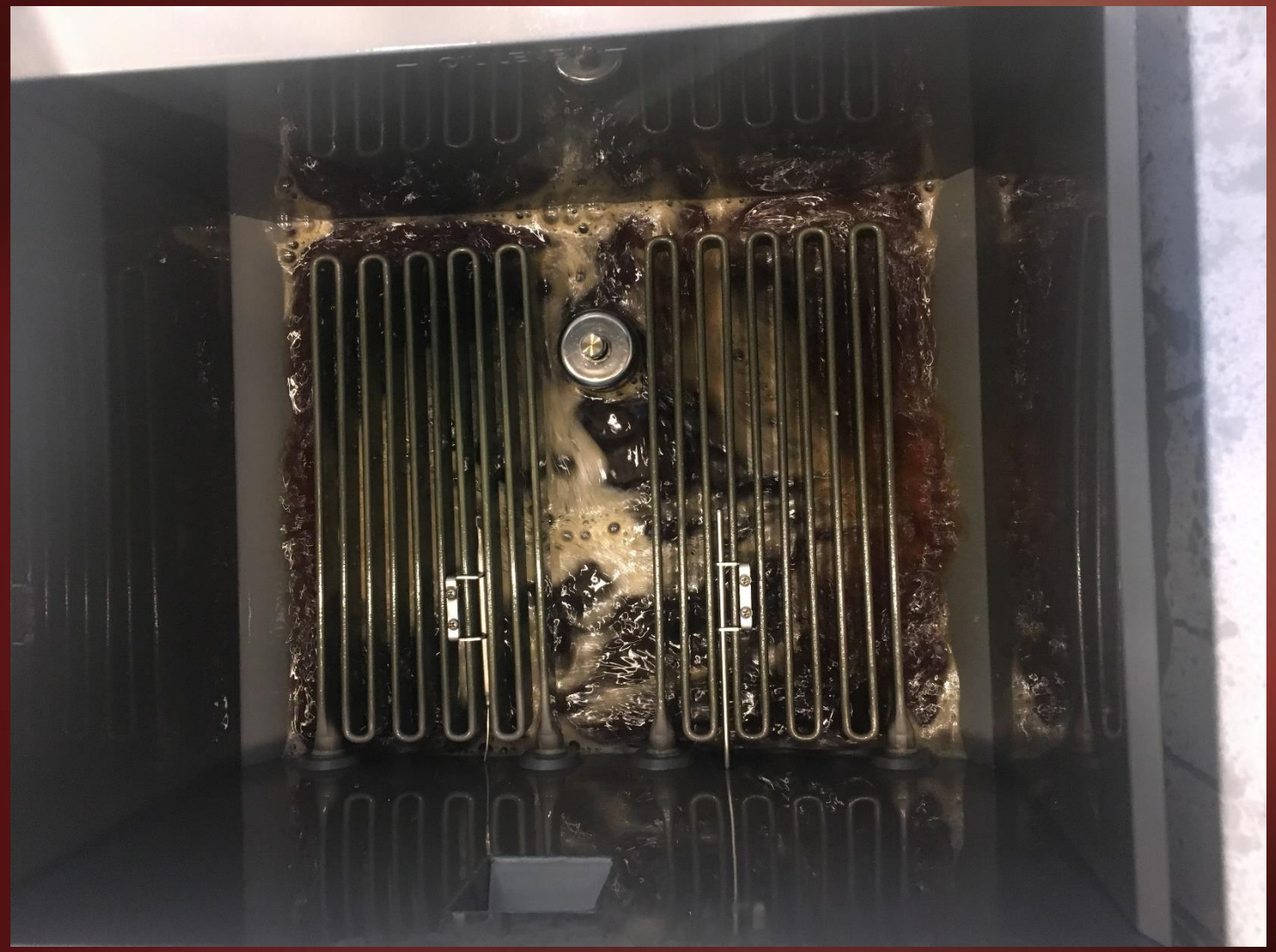
There are two 208V 8500 Watt elements in each fry tank.

Access to the element mounting hardware is the same as the contactors shown previously.



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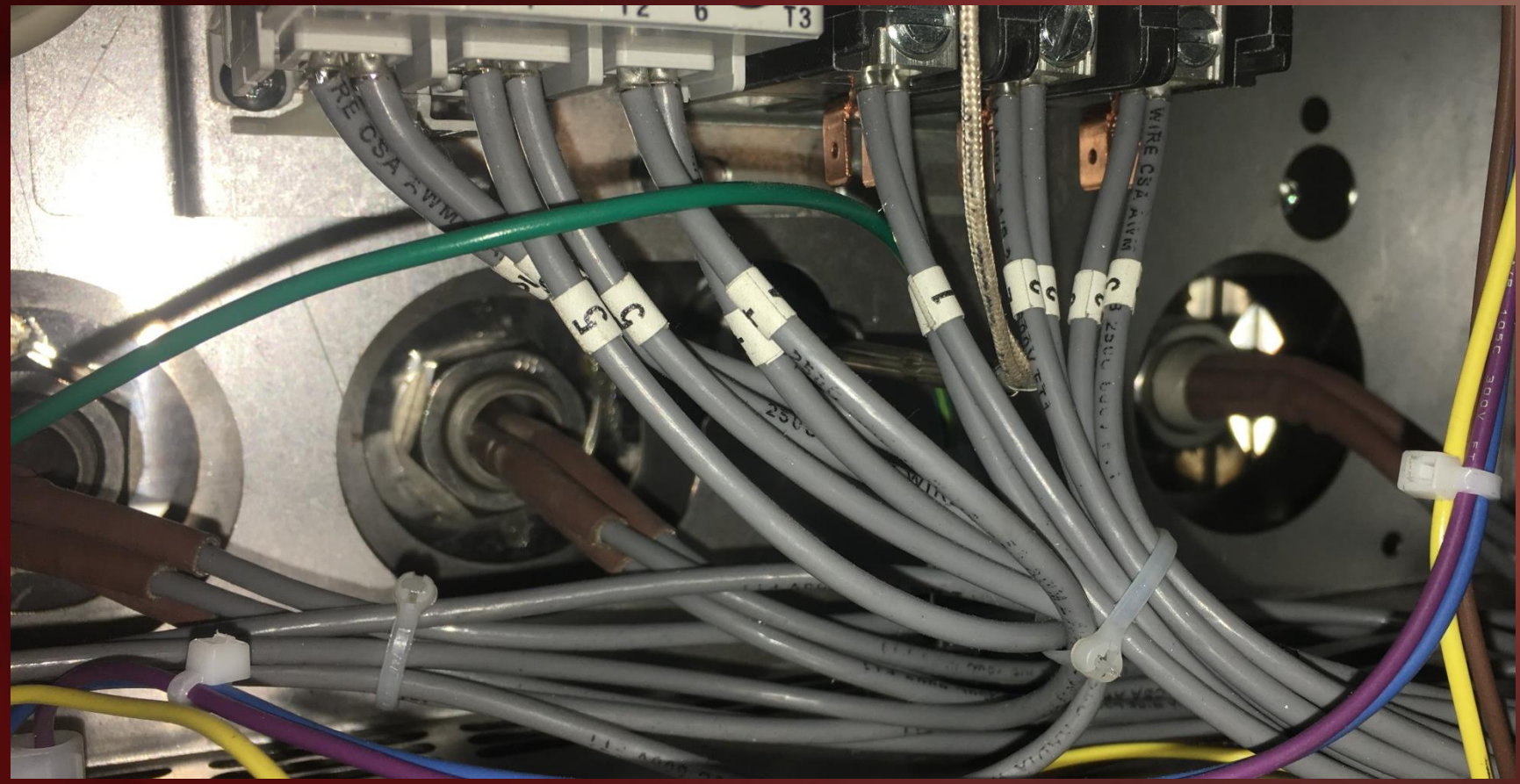
Element Mounting Hardware and Location
Bottom half of electrical box. 2 x ¾" Nut per element.



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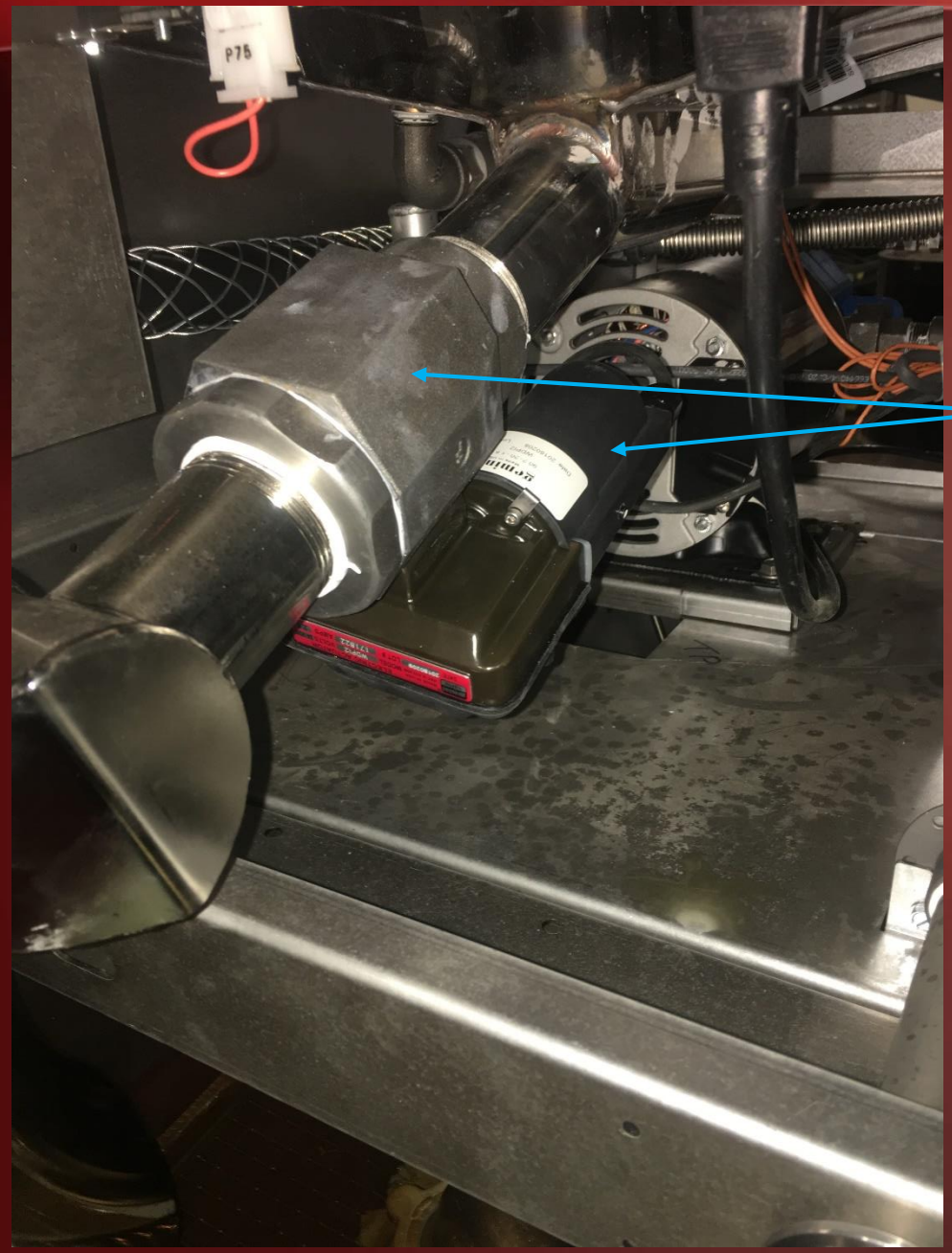

Drain Valve and Actuator:

- Valve Only – 60207403
- Actuator Only – 60207402
- Assembly -- 60207401

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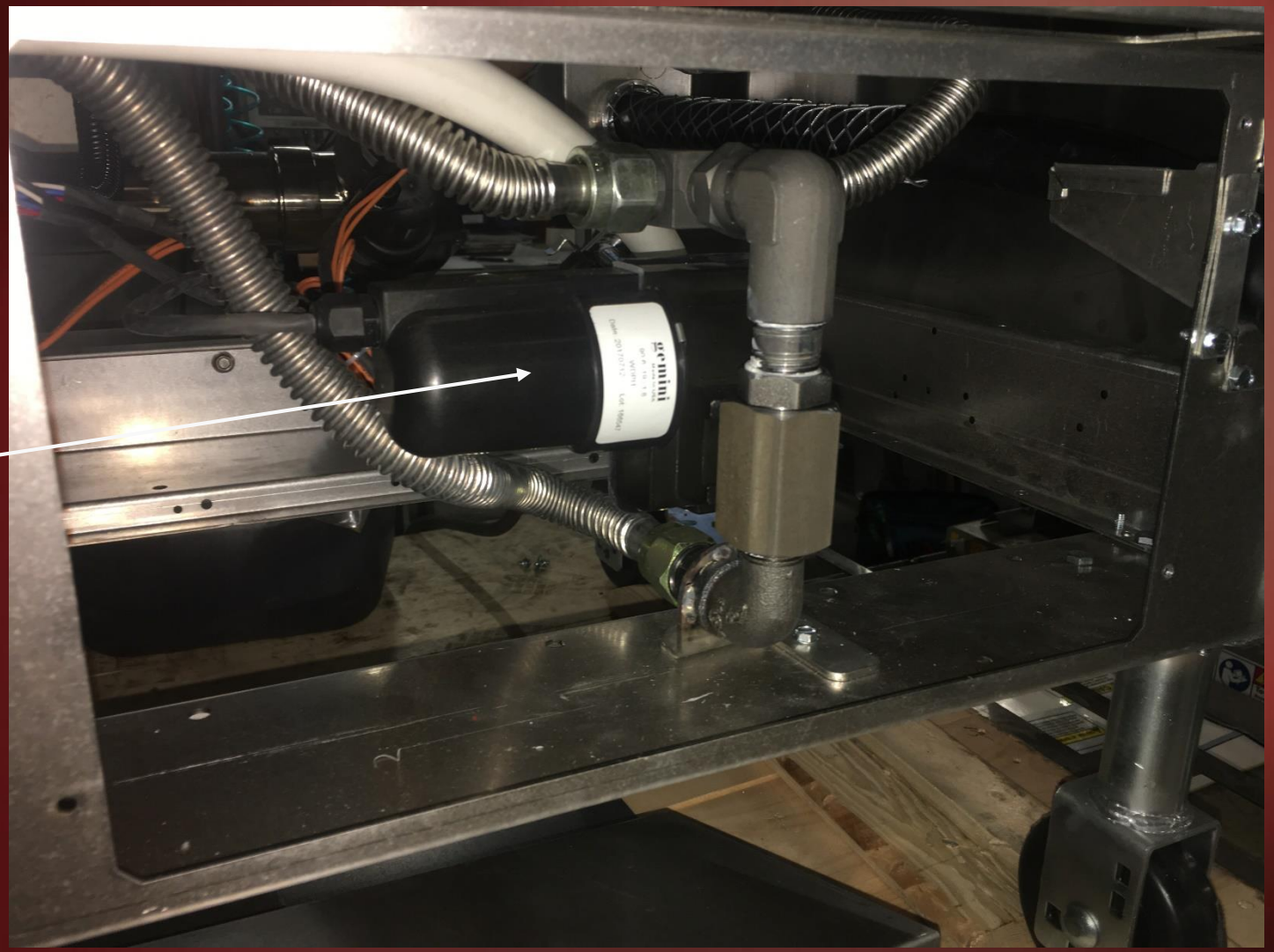
View from the rear of the right side fryer:

24VDC “Return” Actuator:

- Actuator w/2 way valve – 60186602
- This actuator works on DC voltage to open and close the return valve. The return valve allows oil to be pumped back to the fryer from the filter pan and or new oil from the JIB when a top off is requested.



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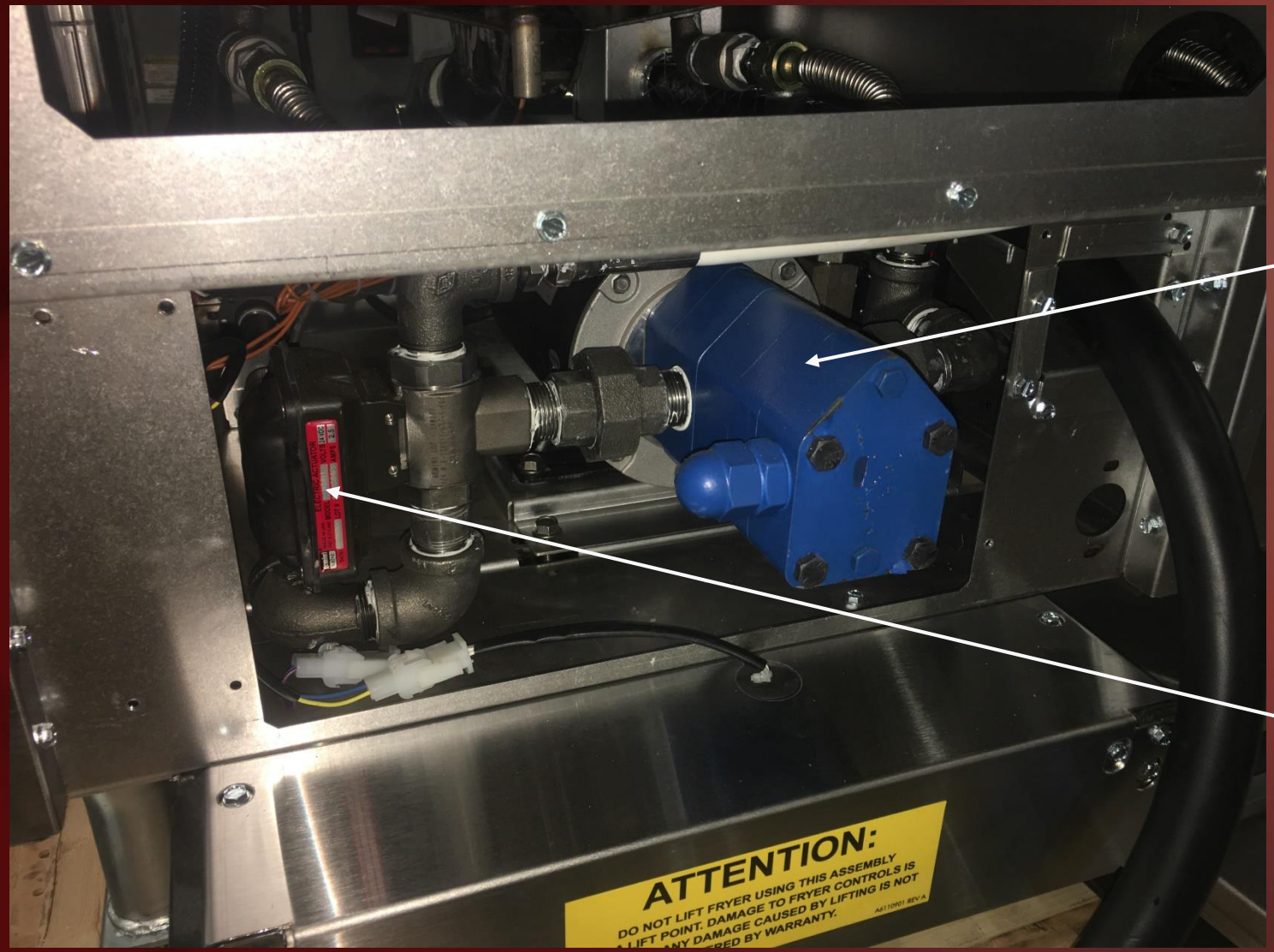
ATTENTION:
DO NOT LIFT FRYER USING THIS ASSEMBLY
LIFT POINT. DAMAGE TO FRYER CONTROLS IS
ANY DAMAGE CAUSED BY LIFTING IS NOT
ERED BY WARRANTY.

Pump / Motor Assembly

- Assembly: 60207601
- Pump Only: 60207602
- Pump Gasket: 60207603

24VDC "Divert" Actuator:

- Actuator w/3 way valve – 60186603

Diverts draft from the pump to the filter pan and or the JIB hose for filtering / ATO operation.

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Oil Return Check Valve -- 60208001

Tank Float – B5302201-C

JIB Hose (Fresh Oil Supply Hose) -- Contact Factory for p/n's

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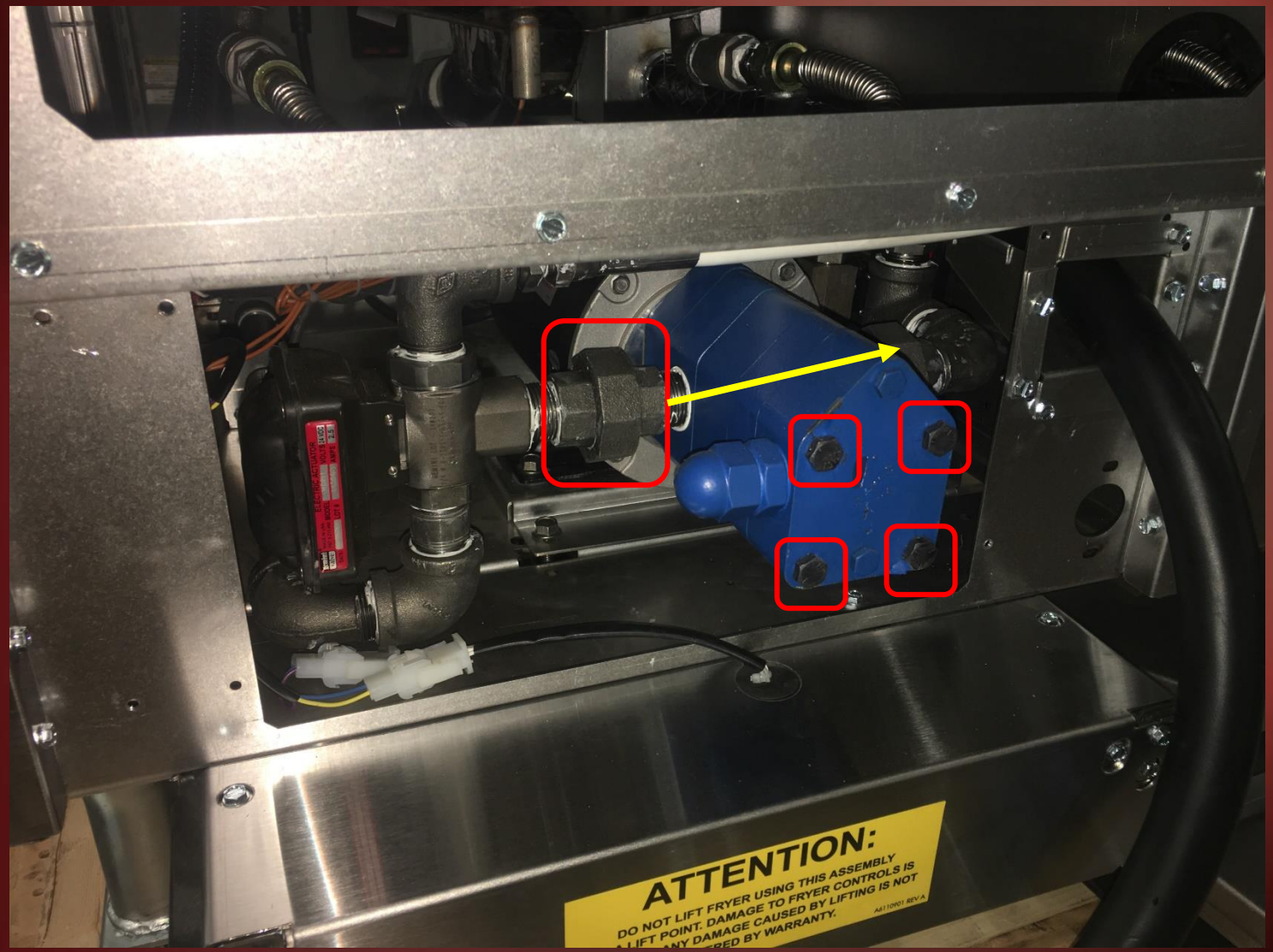
Pump and motor assembly is very accessible and easy to remove for cleaning / troubleshooting / replacing. There is a metal cover plate over the pump. Remove the four 5/16" screws that hold the cover on and remove it. Once removed, the view of the pump / motor looks like the supplied photo.

To remove the pump only: Unplug the power to the motor, loosen the two union fitting on inlet and outlet of the pump, loosen the four bolts on the pump head. You can now slide the pump assembly out of the rear of the unit for servicing.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LIFT POINT. DAMAGE TO FRYER CONTROLS IS
ANY DAMAGE CAUSED BY LIFTING IS NOT
ERED BY WARRANTY.

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Once the pump has been removed from the fryer, you can loosen and remove the other two bolts to separate the pump sections and remove any debris that is prohibiting the pump to turn. Reassemble and reinstall the pump once clean.

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Bottom of the pump has the data plate which shows the p/n of the pump.

Front view shows the bolt patter and shaft of the pump. Make sure to align the shaft key up with the slot of the shaft of the motor when reinstalling onto the motor.

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TOP VIEW OF THE PUMP / MOTOR
With Tank Removed for Clarity

Two mounting bolts. One on each side of the motor mounting bracket…only one shown in the photo.

The motor is mounted on a small mounting plate. The mounting plate is held in by two bolts and a metal bracket. The two bolts are towards the rear of the fryer and are accessible from the rear. The bracket has no hardware. The mounting plate slides underneath the bracket to hold it in place.

To remove Motor…remove back cover, unplug cord, loosen unions on pump, remove white JIB hose, remove both motor mounting plate bolts, slide assembly out the rear opening of the fryer.

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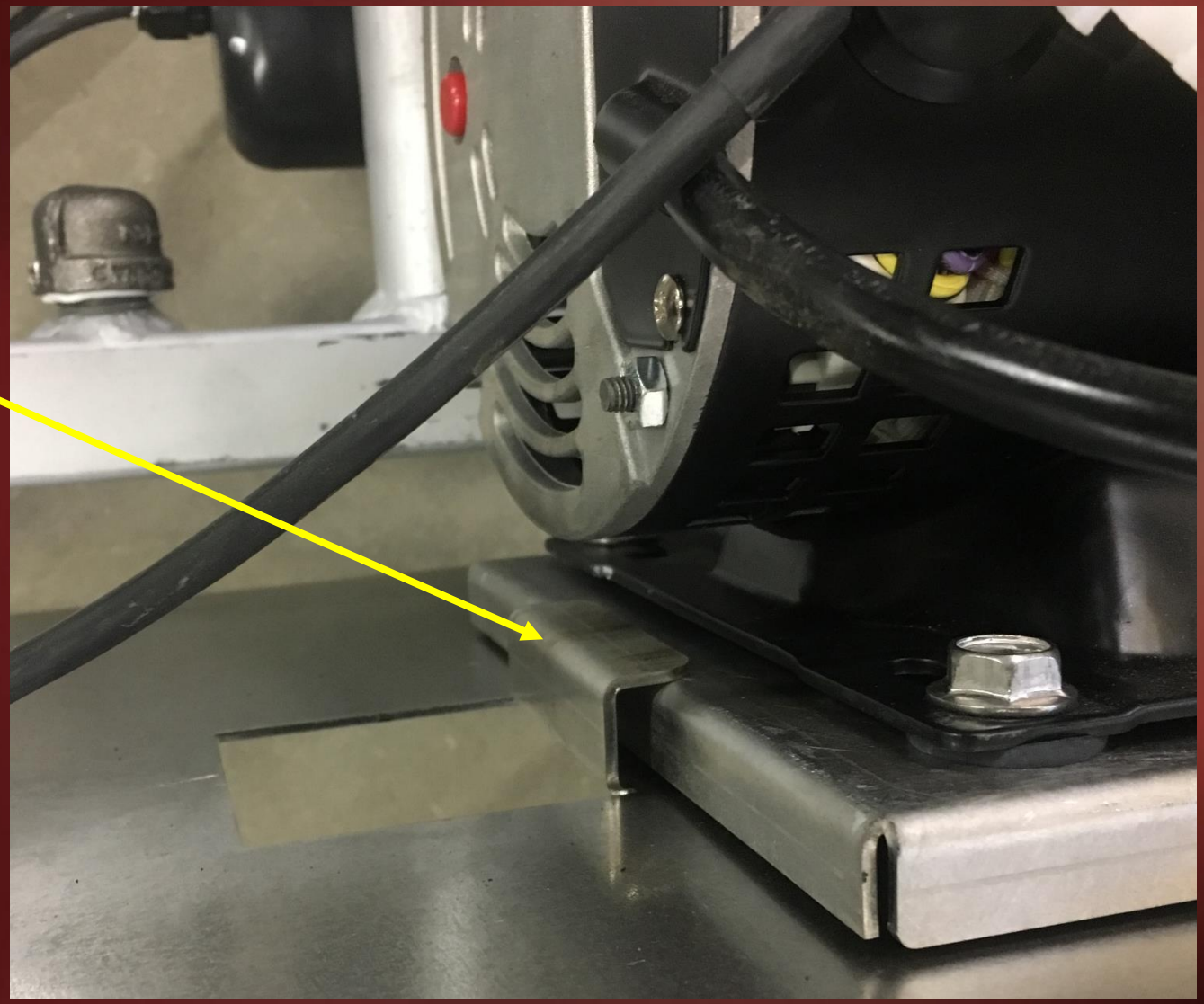
Bracket



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Front of Fryer

Auto Top Off Probe -- 60182701

The SELVRF fryers are able to monitor the oil level throughout normal operation. The Oil Level Probe (OLP) is located in the front wall of the fry tank and lays horizontally from right to left.

This feature can be turned ON or OFF. See K12 programming for instructions to turn ON / OFF.

The OLP system only functions is the SET TEMP is between 325F – 375F. If the SET TEMP is programming outside of this range, the OLP system will automatically be turned OFF.

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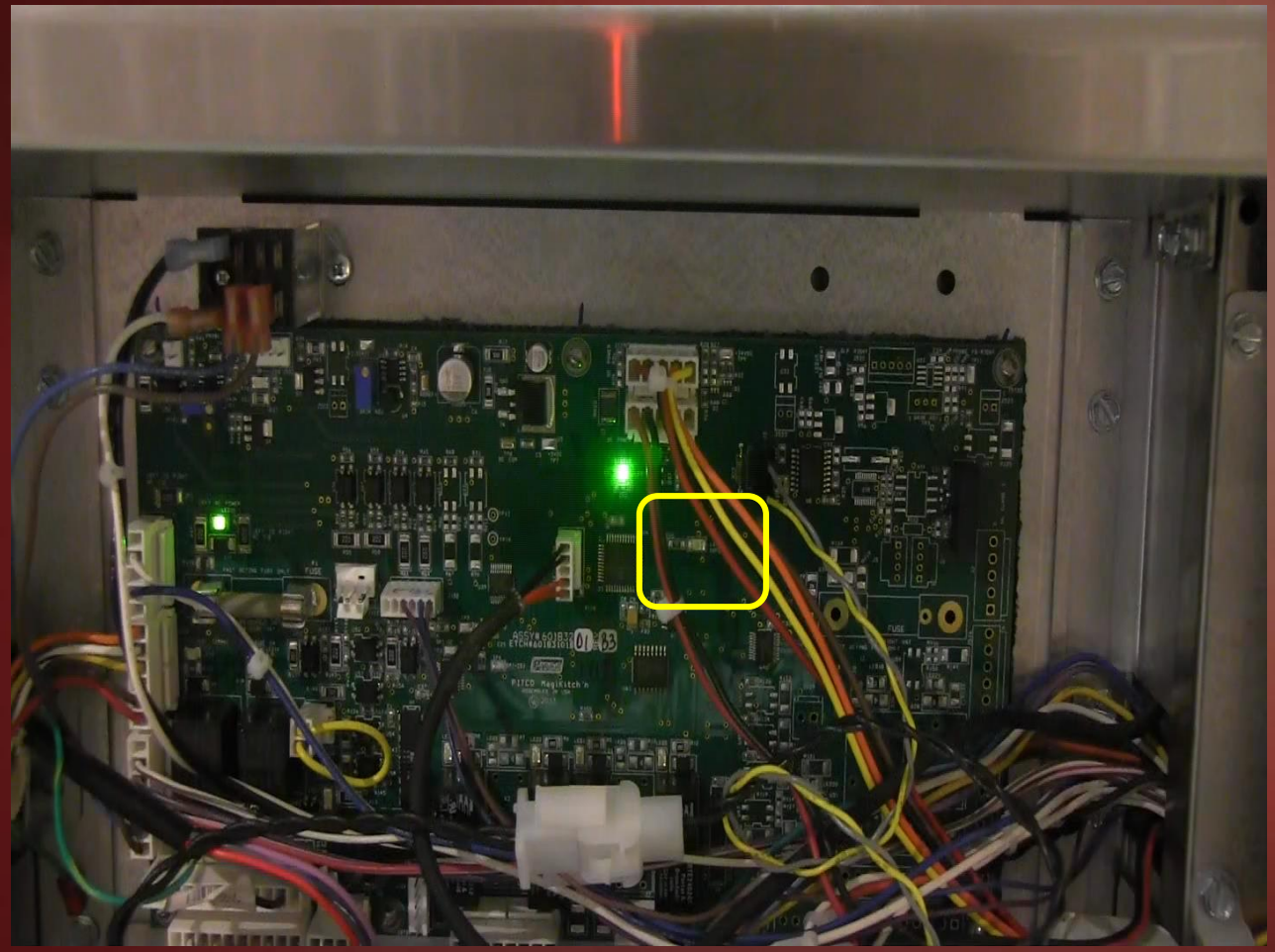
Flashing **RED** Light is a status Light for the OLP.

Repeatedly Flashes code / pauses / Flashes Code.

Two digit code. First Digit is flashed slowly and second digit is flashed quickly.

See Next Slide for Codes



- **Code 22 = Detecting Oil**
- **Code 23 = Detecting Oil, Recent Top Off Event**
- **Code 24 = Idle, Waiting for Ready**
- **Code 25 = OLP Fault**

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The OLP plugs into the AFB at the upper left hand corner.

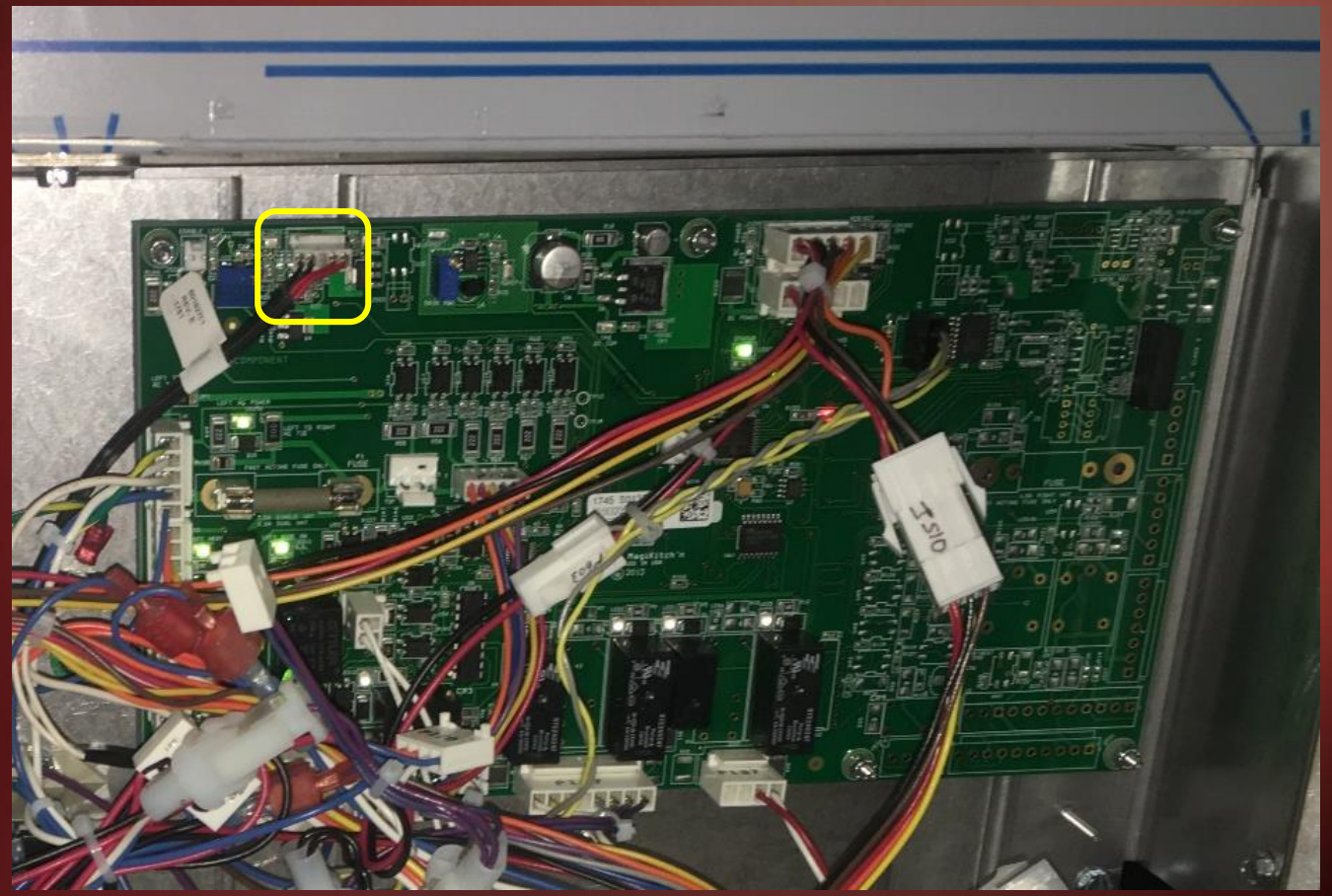
To test the OLP you need an Ω meter.

Red wire to Red wire = 150Ω +/- 10% at all times…Hot or Cold.

Black wire to Black wire = 100Ω - 200Ω depending on temperature. Room temp should be around 105Ω and 350F should be around 166Ω

Any of the four wires to ground should be "OL" Open.

Any red to black wire should be "OL" Open.



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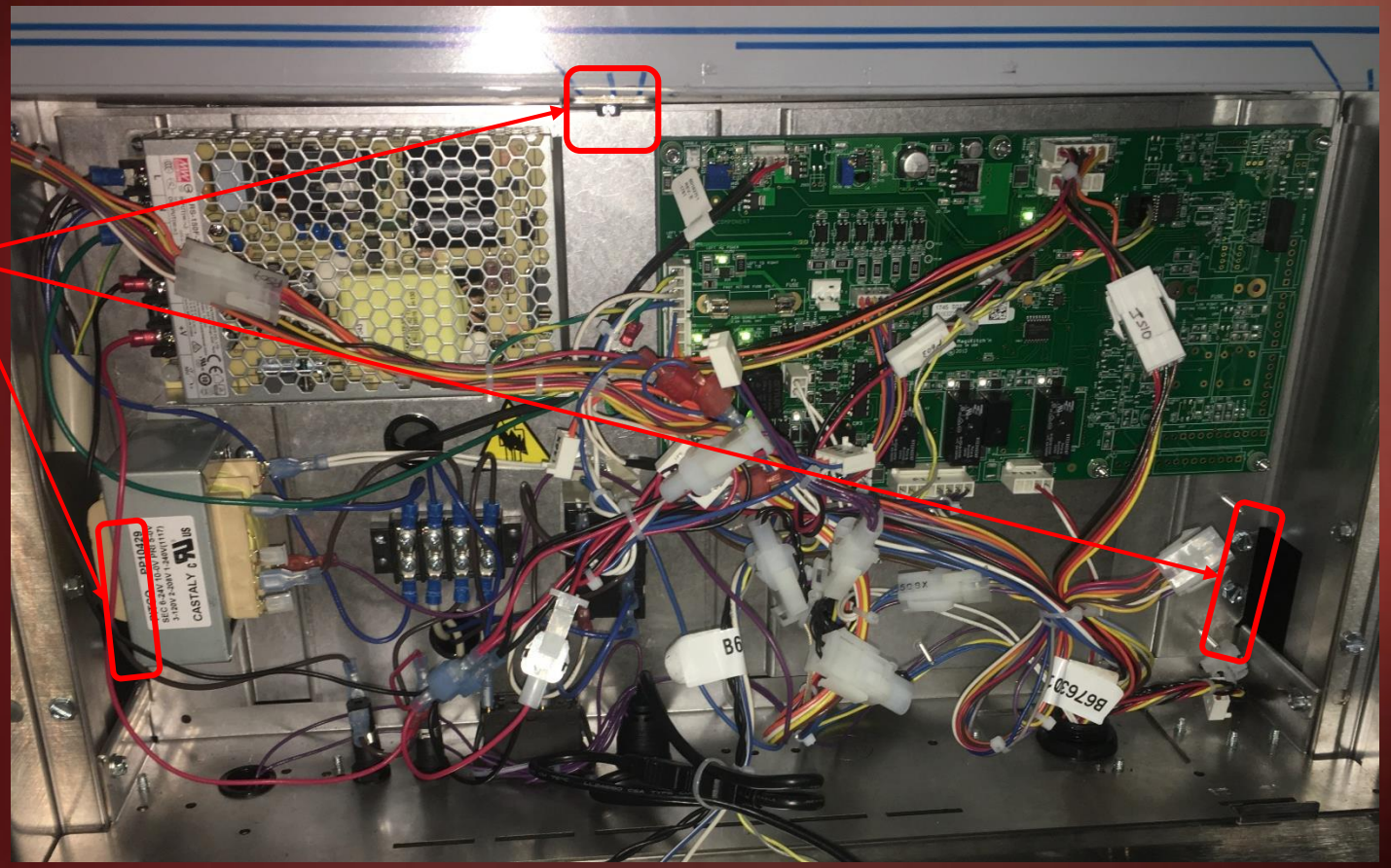
To gain access to replace the Auto Top-Off Probe, remove the front electrical panel.

There are five (5) 5/16" screws that hold it on. Two (2) on the left side next to the transformer, two (2) on the right side, and one (1) in the center top of the control box.

Move or disconnect any wiring that is needed to remove the panel and the next slide will show you what is behind this panel.



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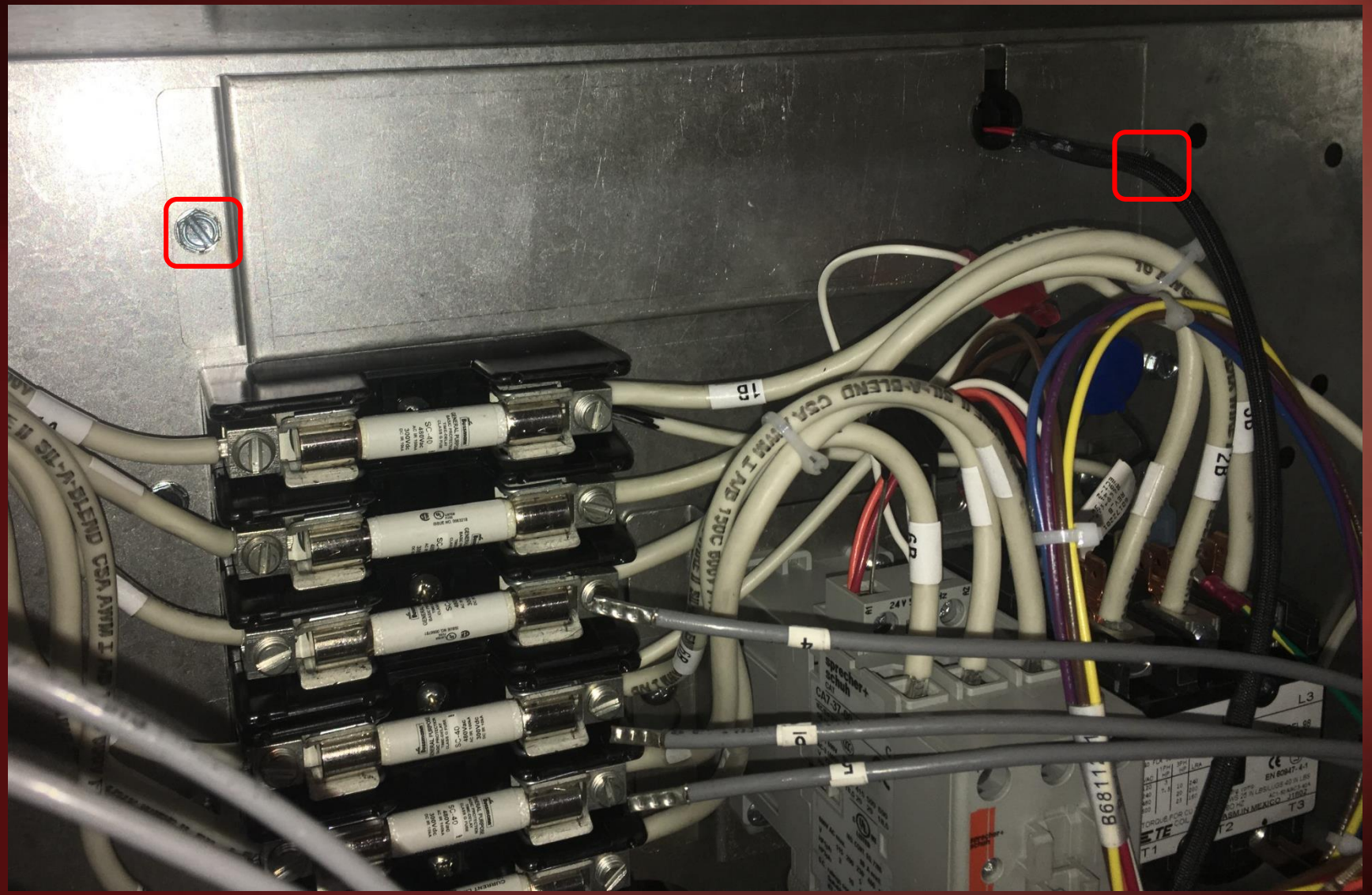
Once the front electrical panel is removed, you now have more access to the Auto Top-Off probe cover.

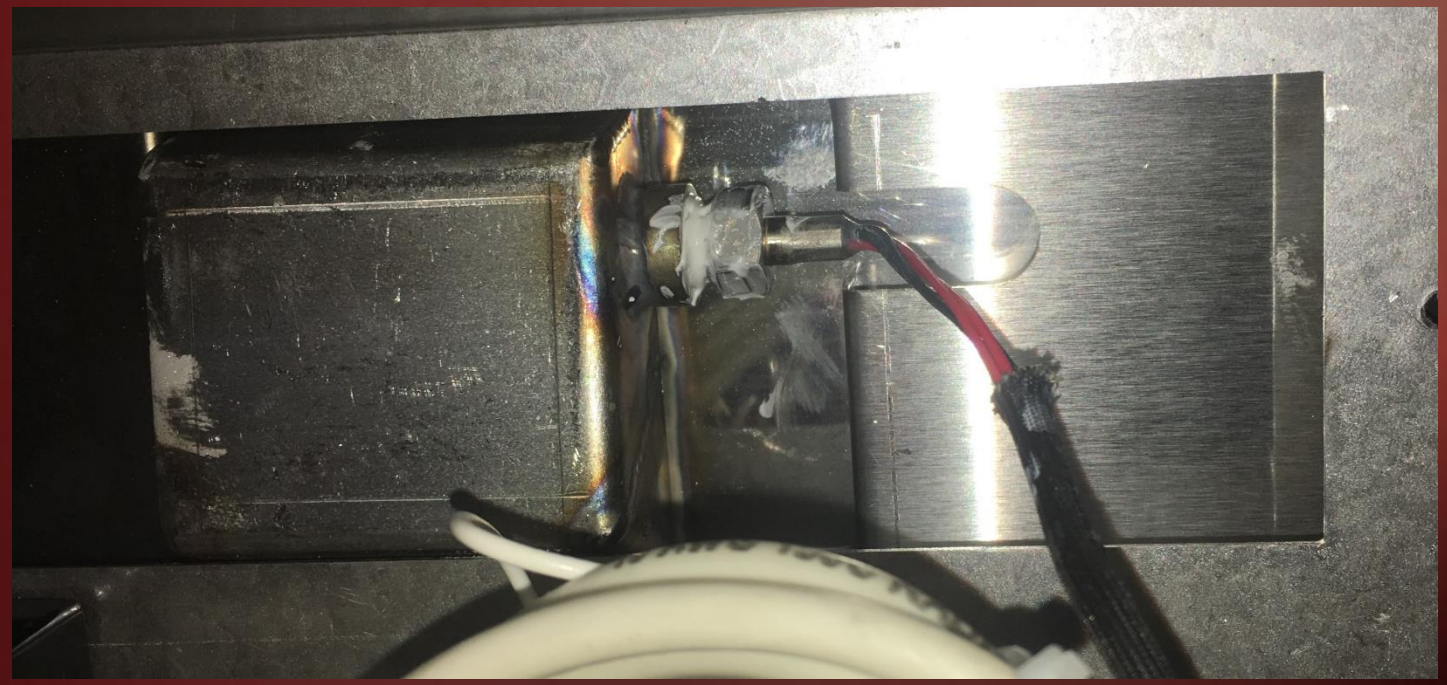
(This also gets you more access to the contactors if it is needed)

Remove two (2) 5/16" screws to remove the OLP cover.



Auto Top-Off Probe can now be removed and replaced if needed. Be sure to use a food safe thread sealant on the threads of the new OLP when installed. Do not overtighten or cross thread the new OLP when installing.

If replacing the probe, test the new probe to make sure it is functioning properly before installing it. See slide 33 for test procedure.



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SOLSTICE SUPREME ROV REDUCED OIL VOLUME

Possible on screen messages that may appear and what they mean:

- **Energy Savings Mode**
  - After every filter cycle, the equipment will be put into an energy savings mode. This mode will drop the set temperature to 300°F.

  - To exit the energy savings mode, press the Thermometer key once and the unit will then heat to the correct set temperature for cooking product (350°F). Press the thermometer key while you are loading product so the fryer will be at the correct cooking temperature by the time you are ready to lower the food into the oil.

- **Quick Filter**
  - Quick filter is what a standard filter process is called. Quick filters will happen after a preset amount of cooks has been performed.

- **Long Filter / Polish / Daily Filter**
  - This filter can be called by different names. This is mainly an end of day filter. It is the same process as the Quick Filter, however, it is for a longer period of time.

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REDUCED OIL VOLUME

Possible on screen messages that may appear and what they mean:

- **Pan Not in Place**
  - The filter pan may not be fully installed, or the fryer cabinet door is open. The filter pan must be fully installed properly and the door closed in order for the filter pan to be properly sensed.

- **Pan Not Empty**
  - The filter pan may not be empty at the start of a filter. Check the filter pan to be sure it is empty of oil and there is no debris under the float in the rear of the filter pan.

- **Clear Drain**
  - The filter pan has not properly sensed oil draining into it from the fry pot during a filter cycle. If the drain is open and the oil is not draining from the fry pot, use the provided drain tool to try and clear the drain of any debris. Once the oil drains into the filter pan, the filter will automatically restart on its own.

- **Check Filter**
  - The oil is returned to the fry tank from the filter pan to finish the filter cycle. If the filter pan is not sensed empty within a predetermined time, the system assumes there is a pump issue. Check to make sure the pre-filter screen is free of any debris and is screwed in and tight (finger tight is okay).

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SOLSTICE SUPREME ROV
REDUCED OIL VOLUME

Possible on screen messages that may appear and what they mean:

- **Check Filter**
  - The oil is returned to the fry tank from the filter pan to finish the filter cycle. If the filter pan is not sensed empty within a predetermined time, the system assumes there is a pump issue.
    - Check to make sure the pre-filter screen is clean and free of any debris. The pre-filter screen is screwed in and tight (finger tight is okay). The white o-ring is properly in place for the pre-screen.
    - Check that the white On/Off switch behind the door towards the top of the cabinet is in the ON position. This is the circuit breaker for the pump motor.
    - Towards the bottom of the cabinet there is a pump box. This has the power cord for the pump motor plugged into it. Verify it is fully plugged in and has not become loose and not making a good connection.

- **Auto Error**
  - The filter pan was sensed as not in place during a running filter cycle. This error will shut down all operation and the operator must intervene to finish the filter cycle.
    - Check to make sure the filter pan did not get pulled out from the fryer while the fryer was in a filter mode. Replace the filter pan or push the filter pan back in place

Possible on screen messages that may appear and what they mean:

- **Auto Error**
  - The filter pan was sensed as not in place during a running filter cycle. This error will shut down all operation and the operator must intervene to finish the filter cycle.
    - Check to make sure the filter pan did not get pulled out from the fryer while the fryer was in a filter mode. Replace the filter pan or push the filter pan back in place.
    - Once the filter pan has been put back into the proper position, you will need to manually return the oil to the fry pot using the computer interface.
      - Press and hold the middle filter button until display changes
      - Press button "L"
      - Press button "6" to turn the pump on
      - Press button "6" to turn the pump off when the oil is fully returned to the fry pot.
      - Turn fryer off.
      - Turn fryer back on if it is needed for cooking.

Possible on screen messages that may appear and what they mean:

- **Clear Blocked Drain – Retry Y/N?**
  - During the filter cycle, the system automatically closes the drain. If there is debris or tools in the drain when it attempts to close it, the drain will not close correctly and give you this message.
    - Remove any debris or tools from the drain and press the "6" button for Yes to retry and close the drain.
    - If all debris has been removed, the drain should close.
    - You get three (3) attempts at a retry to close the drain. After your third attempt, the fryer shuts down and you are required to call for service. Do not power cycle the fryer at this time. Call for service.

- **Call for Service – Err 2002**
  - Drain is not able to be sensed as closed and the operation of the fryer has been down. Contact Pitco at 603-225-6684 or your local authorized service agent. Do not power cycle the unit at this time.

Possible on screen messages that may appear and what they mean:

- **Filter Lock or Filter Now**
  - The fryer must be filtered before any further cook timers can be started.

- **Low JIB**
  - JIB stands for Jug in Box and is referring to the container of fresh oil in the cabinet of the fryer.
    - If you have a single fryer, this JIB is the metal slide out box that you manually fill with oil.
    - If you have a dual fryer, this will be the plastic jug of fresh oil located in the left hand fryer cabinet.
  - Low JIB means the fresh oil level is low and needs to be refilled.

- **JIB Empty**
  - JIB is empty and requires more fresh oil.
  - Refill / replace JIB and reset the JIB.
    - Reset the JIB by pressing and holding the CLOCK button until RESET JIB Y/N is displayed and press button “6” for yes to reset.

Possible on screen messages that may appear and what they mean:

- **Check JIB**
  - Fryer is trying to take fresh oil from the JIB but it is not able to.
    - Refill, replace JIB and reset JIB.

- **Heat Failure**
  - Usually this is due to a tripped hi limit and or roll out switch.
    - Turn fryer off. Reset both the hi limit and roll out switch by pushing on the reset buttons for each.
    - Turn fryer back on to see if correct operation returns.
    - If proper operation does not return, call Pitco or your local authorized service agent.

- **Open Probe**
  - Temperature probe issue. Call Pitco or your local authorized service agent.

Possible on screen messages that may appear and what they mean:

- **System Failure**
  - Temperature probe issue. Call Pitco or your local authorized service provider.

- **High Tmp**
  - The sensed temperature of the oil reached 40°F higher than the set temperature in the computer. Example: Set temp of 350°F and temp probe is reading 390°F or higher the unit will display High Tmp. Call Pitco or your local authorized service provider.

- **Draining Turn Off**
  - Drain is not sensed closed when fryer is powered on.
    - Call Pitco or your local authorized service provider

Possible on screen messages that may appear and what they mean:

- **Commlink Failure**
  - Communication between the computer and the relay board is lost. Fryer will still cook, however, all filter functions will not work.
  - Call Pitco and or your local authorized service provider.

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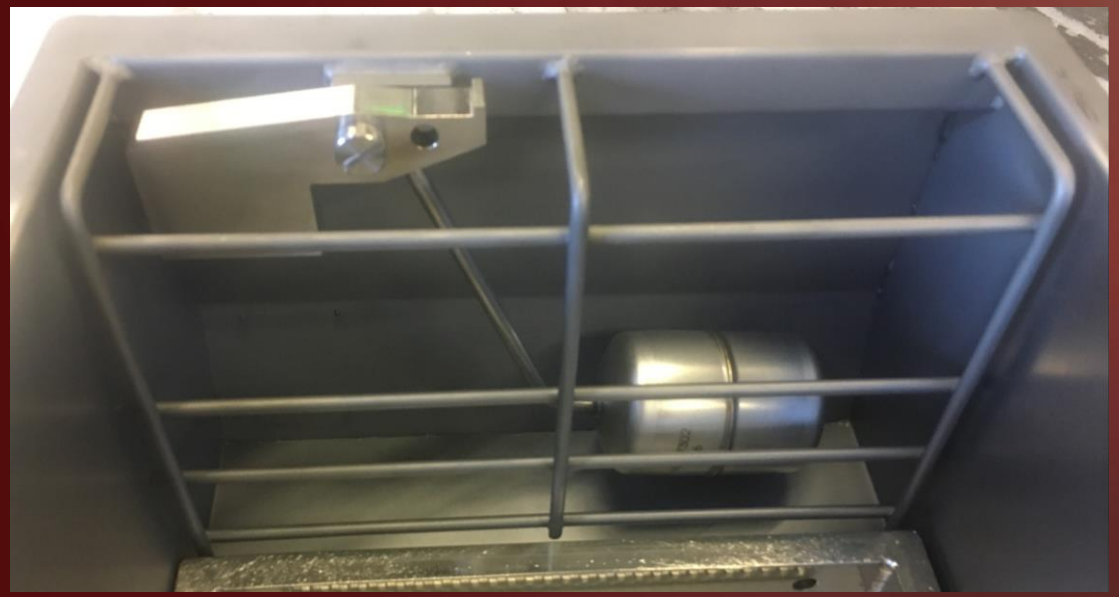
- The filter pan will have a float assembly in the rear of the pan. This float is what tells the computer if the filter pan is “empty” or “not empty”. The float should move freely up and down a short distance. Take caution in cleaning the filter pan as to not damage the float. The float arm and or the float ball itself can be replaced if damaged. Call factory for proper p/n’s. Do not field fix this assembly as it is counterbalanced for proper operation.



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- There are two switches that send info to the computer
- Pan In Place switch: Is a plunger style switch that when the filter pan is placed correctly, it closes this switch and the computer knows the filter pan is correctly in place. If the filter pan is not sensed in place, the equipment will not open the drain and display "Filter Pan Not in Place"
- Pan Not Empty switch: This switch reacts with the float in the pan that tells the computer if the filter pan is not empty. If the filter pan is not sensed as EMPTY, the equipment will not open the drain and computer will display "Filter Pan Not Empty"
- Access to these switches is in the rear of the fryer which houses the filter pan

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This view is from under the fryer with no filter pan in place. You can see both the Pan in Place (PIP) and the Pan not Empty (PNE) switch locations.

PIP Switch

OEM P/N 60199601
Screw: 60118201

PNE Switch

OEM P/N
Electric Switch B5305001
Magnet PP10263
Screw (4-40 x .250: PP10266

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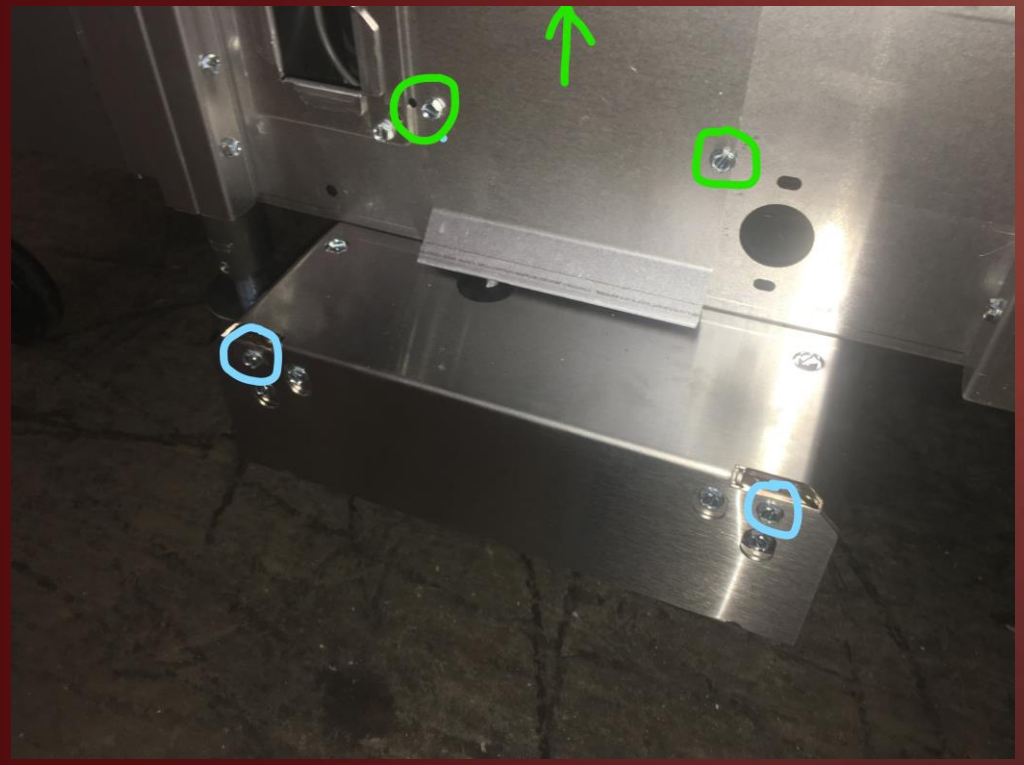
The switches are located in a metal casing at the rear of the fryer that houses the filter pan.

There are three 5/16" screws that hold on a panel (green) and two 5/16" screws holding the cover over the switch assembly (blue).

Remove the panel and cover in order to gain access to replace the switches.



Remove only the panel in order to gain access to check the Ω of the switches.

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Once the panel is removed, you can see there are two sets of wiring and plugs.

The two white wires are for the magnetic proximity switch. This switch is sensing if the pan is NOT EMPTY or EMPTY and works with the float in the filter pan.

The two grey wires are for the plunger style switch and detects if the filter pan is in place correctly.

Use an Ω meter to check the operation / status of these two switches.

Filter pan installed = .1 - .5Ω
Filter pan not installed = "OL"Ω

Pan Empty = 01 - .5Ω
Pan NOT Empty = "OL"Ω

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On the back side of the plugs, the wire colors change.

Proximity switch is Green and Black
Pan in Place switch is Red and White

All four of the wires (green, black, red, and white) all are part of one cable that runs up to the front control panel.

This cable is a grey colored cable and terminates at a 4 pin plug labelled as J508.

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The float is located in a protective cage in the rear of the filter pan. When it rises as fluid fills the filter pan, it causes the end of the counterbalance to rise. When it rises, it pushes UP on the proximity switch causing the switch circuit to open ("OL" Ω) and the computer will then know the filter pan is NOT EMPTY.

OEM P/N's:

Float only = 60205702

Arm/Counterweight = B7003701-C

Shoulder Screw = 60199901

"**Pan Not In Place**" Is displayed when you attempt to start a Filter, Polish, or Dispose and the system does not recognize the filter pan is installed correctly.

Could be the filter pan not installed all the way or the plunger style switch is in need of adjustment or replacement. Could also be the fryer cabinet door is not closed or door switch is not functioning

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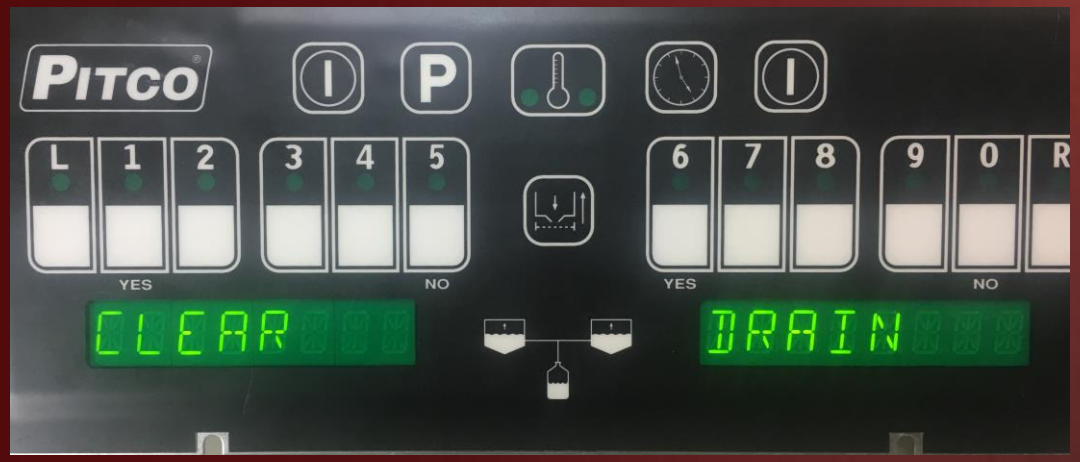
"**Clear Drain**" is displayed if the pan not empty switch does not change status from Empty to Not Empty after 30 seconds when the drain opens for Filter, Polish, or Dispose functions.

Usually this is due to a clogged drain not allowing the oil to flow from the fry pot to the filter pan. Use the drain tool to unclog the drain. Once the fry pot drains and the pan not empty switch changes from empty to not empty, you can either press the check mark key or just wait and the system will proceed with the Filter, Polish, or Dispose process.



"**Auto Filt Error**" will be displayed if at any time during a Filter, Polish, or Dispose the filter pan is removed or sensed as not in place.

Verify filter pan is in place and press the ON/OFF key. The fryer will revert to the OFF mode.

To return the oil from the filter pan to the fry pot, you must enter the manual operation mode of the I/K-12 controller. Press and hold the filter button to enter this mode. Once the oil has been returned, you can restart the Filter, Polish, or Dispose mode.

"**Remove Tools**" will be displayed prior to the below blocked drain error to alert you to remove any cleaning tools you may have left in the drain that might be keeping the drain from closing.

"**Blocked Drain, Retry Y or N**" will be a scrolling display when, during a Filter, Polish, or Dispose, the system attempts to close the drain but the drain does not close or is not sensed as closed. You get three chances to press the "Y" button to retry closing the drain. Make sure all food, metal, foreign objects are removed from the drain before pressing "Y" to retry the drain. After your third attempt, the system will make that fryer inoperable until the problem is fixed and you will not be able to use that fryer.

"**Offline – Call For Service, Error 2002**" Will be a scrolling display once the three attempts to close the drain have been exhausted. The fryer will no longer function until the error is cleared.

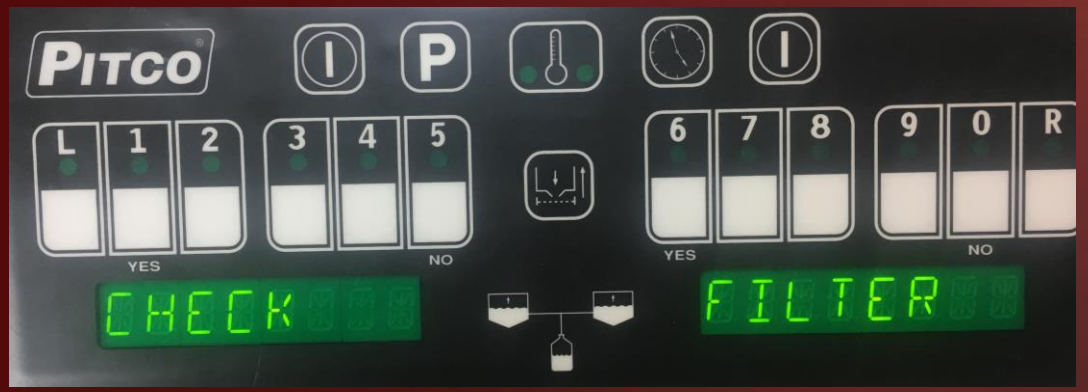
Do not reset the error until you clear the drain of debris, or repair the drain so it closes correctly. Further damage to the drain or drain actuator will occur if it is not fixed prior to resetting this error.

To reset the error, you must disconnect / interrupt the 24vdc signal to the Auto Filter Board. You can do this by disconnecting AC power to the fryer bank or contacting a Pitco Service Provider.

"**Check Filter**" will be displayed when "filling" is on the screen during a Filter or Polish.

Filling, means the pump is filling the fry pot with oil from the filter pan. If the pump runs for 2:30 and the pan not empty switch does not change status from "not empty" to "empty" the system gives you a warning that something may be wrong. Pressing the On/Off key clears this error and turns the system OFF. You mush enter the manual filter mode of the computer to pump any left over oil from the filter pan to the fry pot. Press and hold the filter button to enter this manual mode.

Usual causes are a clogged pre filter prescreen, incorrectly assembled filter pan/paper, bad O-rings in plumbing for filter system, motor circuit tripped or motor unplugged.



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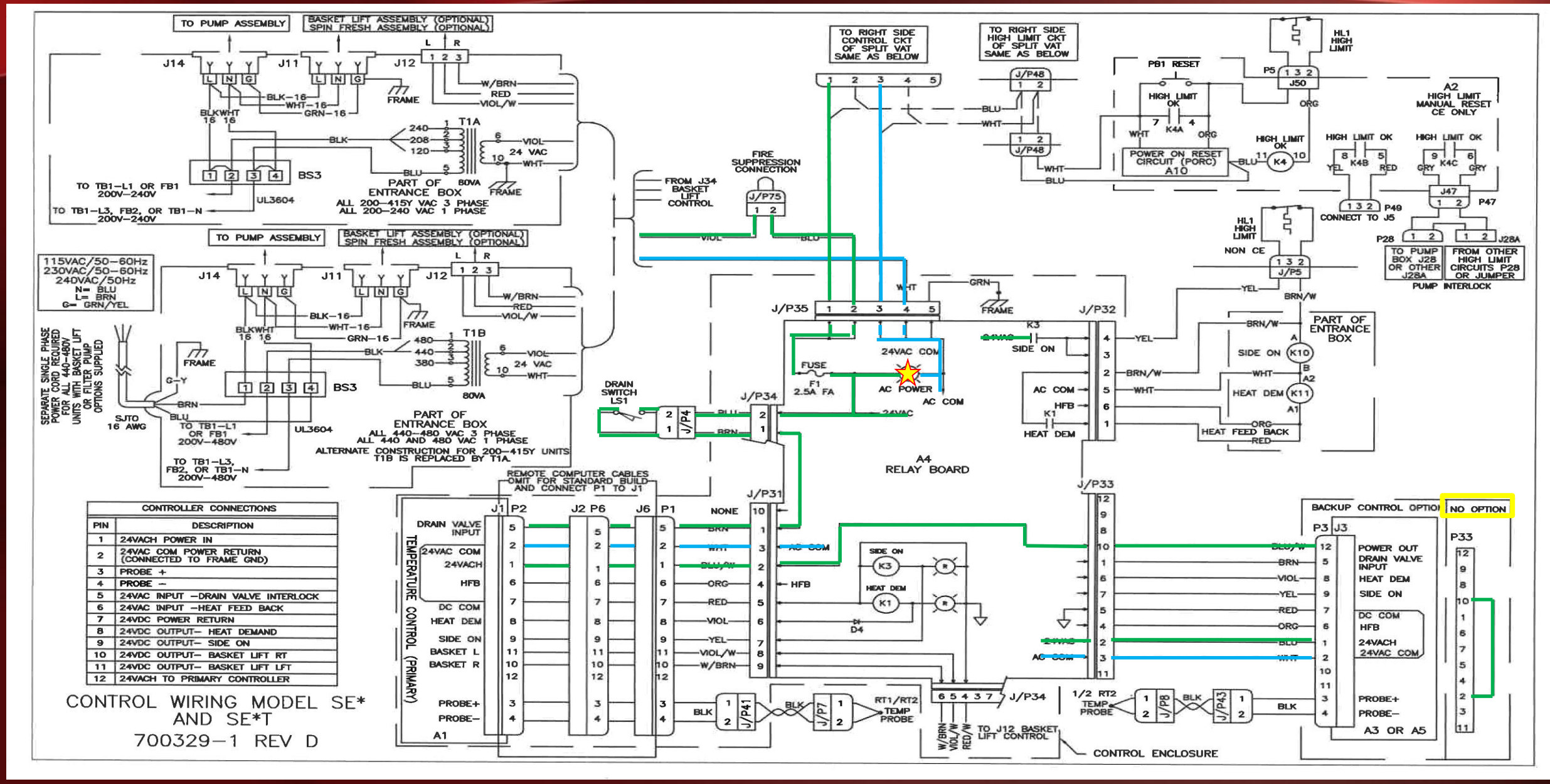
REDUCED OIL VOLUME

This training material is for Pitco ASA's only. This information is intended for training purposes. Pitco is not responsible for damage to equipment, personal injury, or property damage while performing any of the instructions shown in this training.

Always disconnect electrical power to the appliance when servicing.

For a list of Pitco ASA's, visit www.pitco.com or call 603-225-6684 opt. 2 for Pitco technical service assistance.

WIRING THEORY OF OPERATION

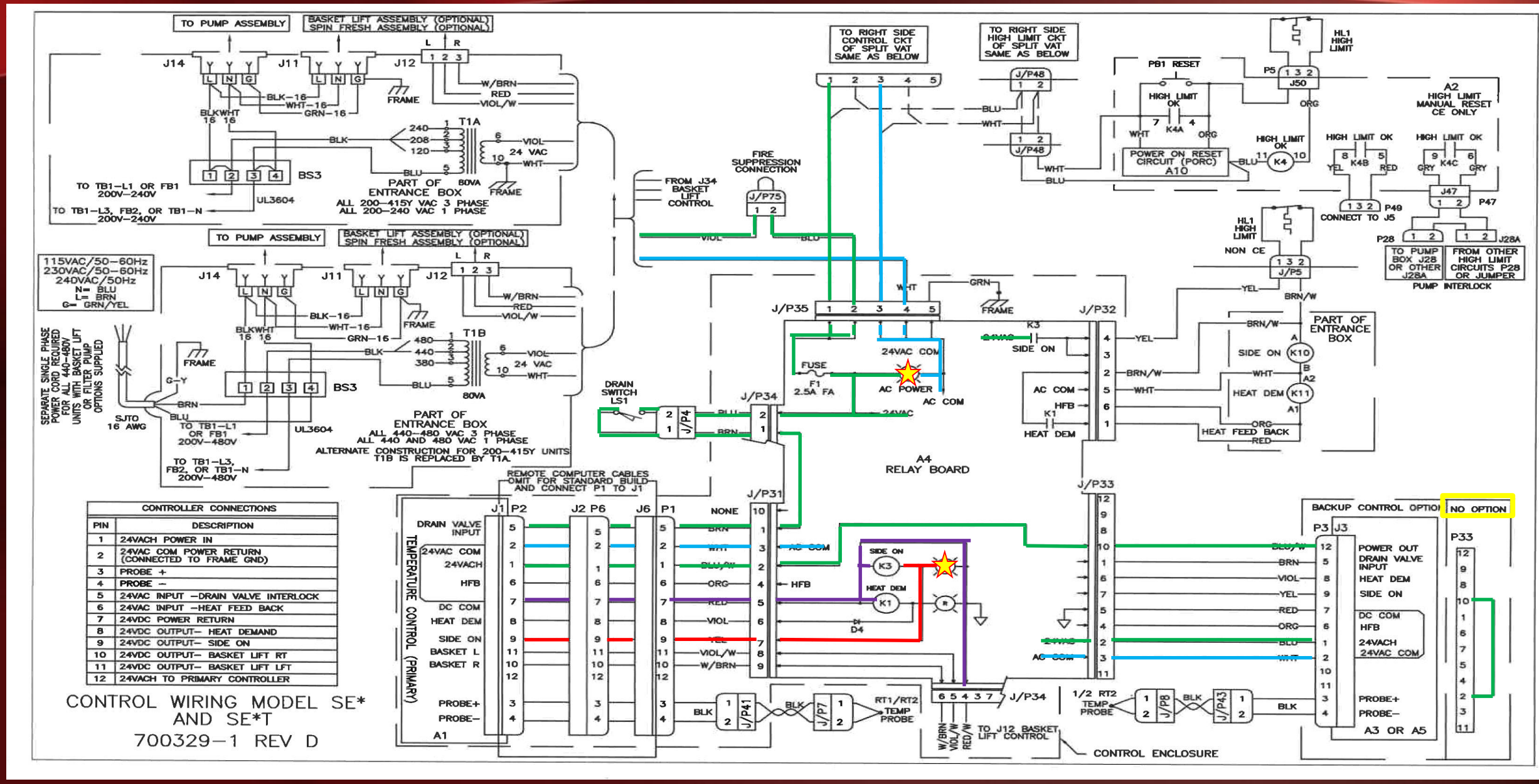


CONTROLLER CONNECTIONS	
PIN	DESCRIPTION
1	24VACH POWER IN
2	24VAC COM POWER RETURN (CONNECTED TO FRAME GND)
3	PROBE +
4	PROBE –
5	24VAC INPUT –DRAIN VALVE INTERLOCK
6	24VAC INPUT –HEAT FEED BACK
7	24VDC POWER RETURN
8	24VDC OUTPUT– HEAT DEMAND
9	24VDC OUTPUT– SIDE ON
10	24VDC OUTPUT– BASKET LIFT RT
11	24VDC OUTPUT– BASKET LIFT LFT
12	24VACH TO PRIMARY CONTROLLER

CONTROL WIRING MODEL SE* AND SE*T

700329–1 REV D

WIRING THEORY OF OPERATION



CONTROLLER CONNECTIONS	
PIN	DESCRIPTION
1	24VACH POWER IN
2	24VAC COM POWER RETURN (CONNECTED TO FRAME GND)
3	PROBE +
4	PROBE –
5	24VAC INPUT –DRAIN VALVE INTERLOCK
6	24VAC INPUT –HEAT FEED BACK
7	24VDC POWER RETURN
8	24VDC OUTPUT– HEAT DEMAND
9	24VDC OUTPUT– SIDE ON
10	24VDC OUTPUT– BASKET LIFT RT
11	24VDC OUTPUT– BASKET LIFT LFT
12	24VACH TO PRIMARY CONTROLLER

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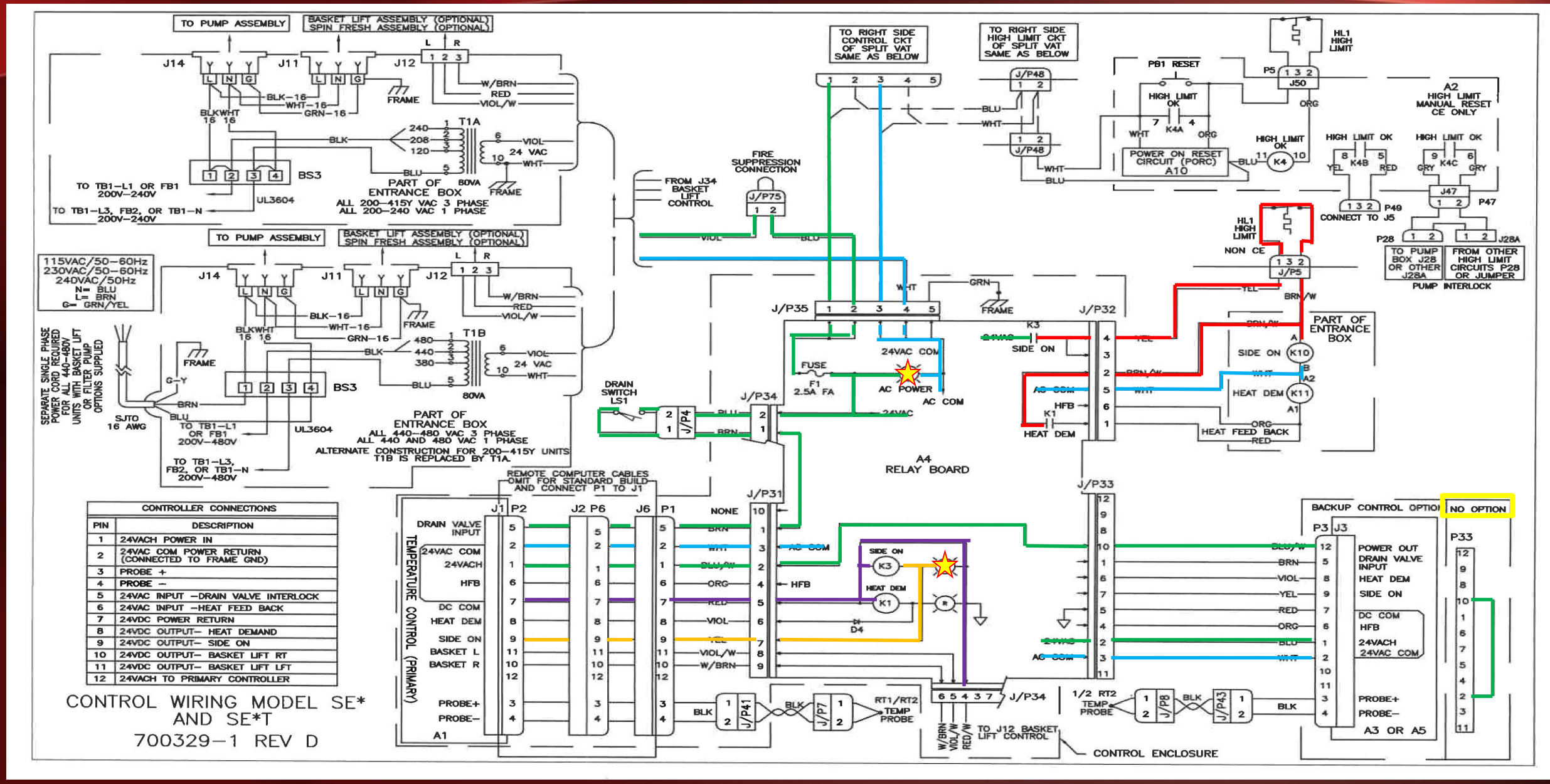
WIRING THEORY OF OPERATION



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CONTROL WIRING MODEL SE* AND SE*T

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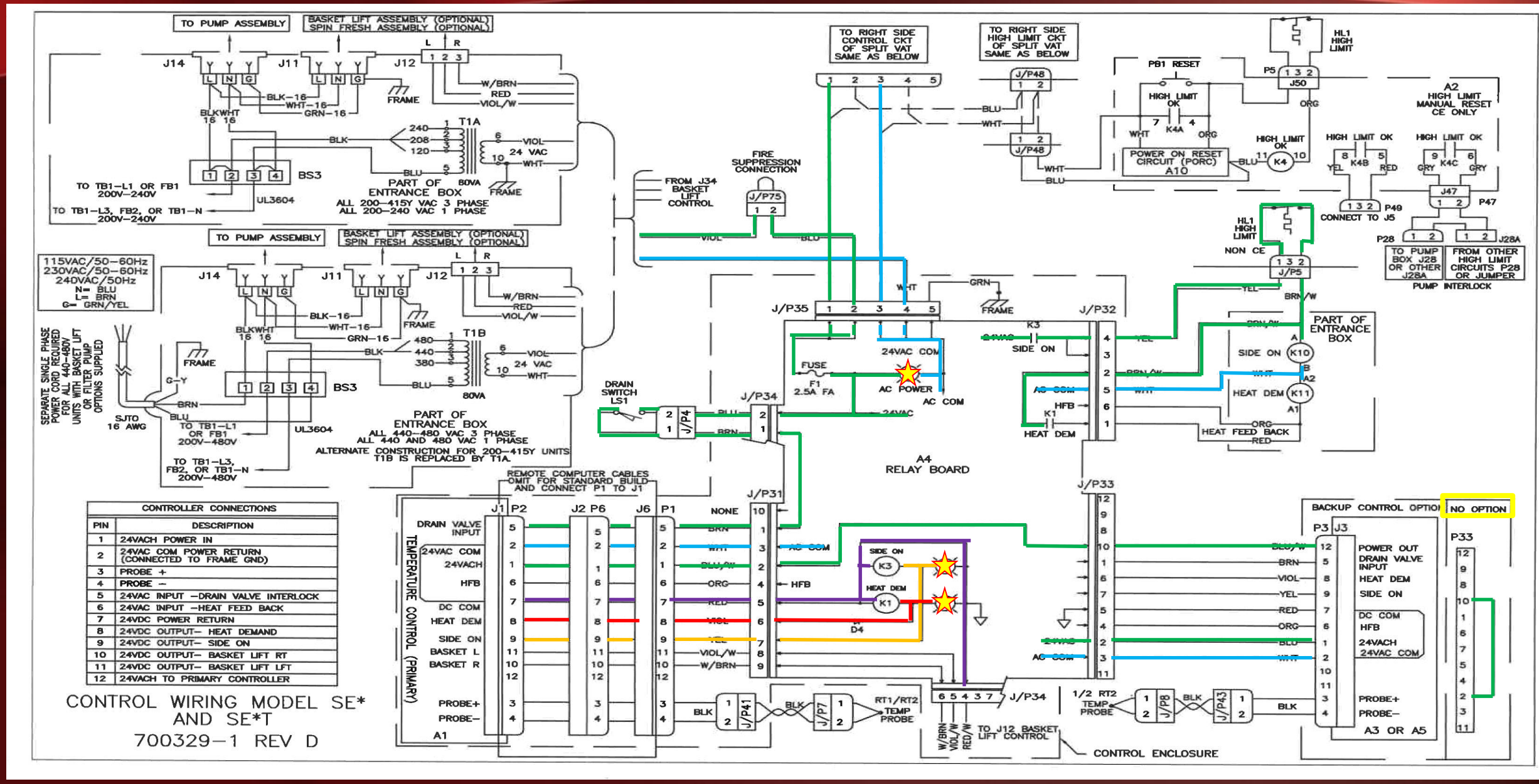
WIRING THEORY OF OPERATION



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CONTROL WIRING MODEL SE* AND SE*T

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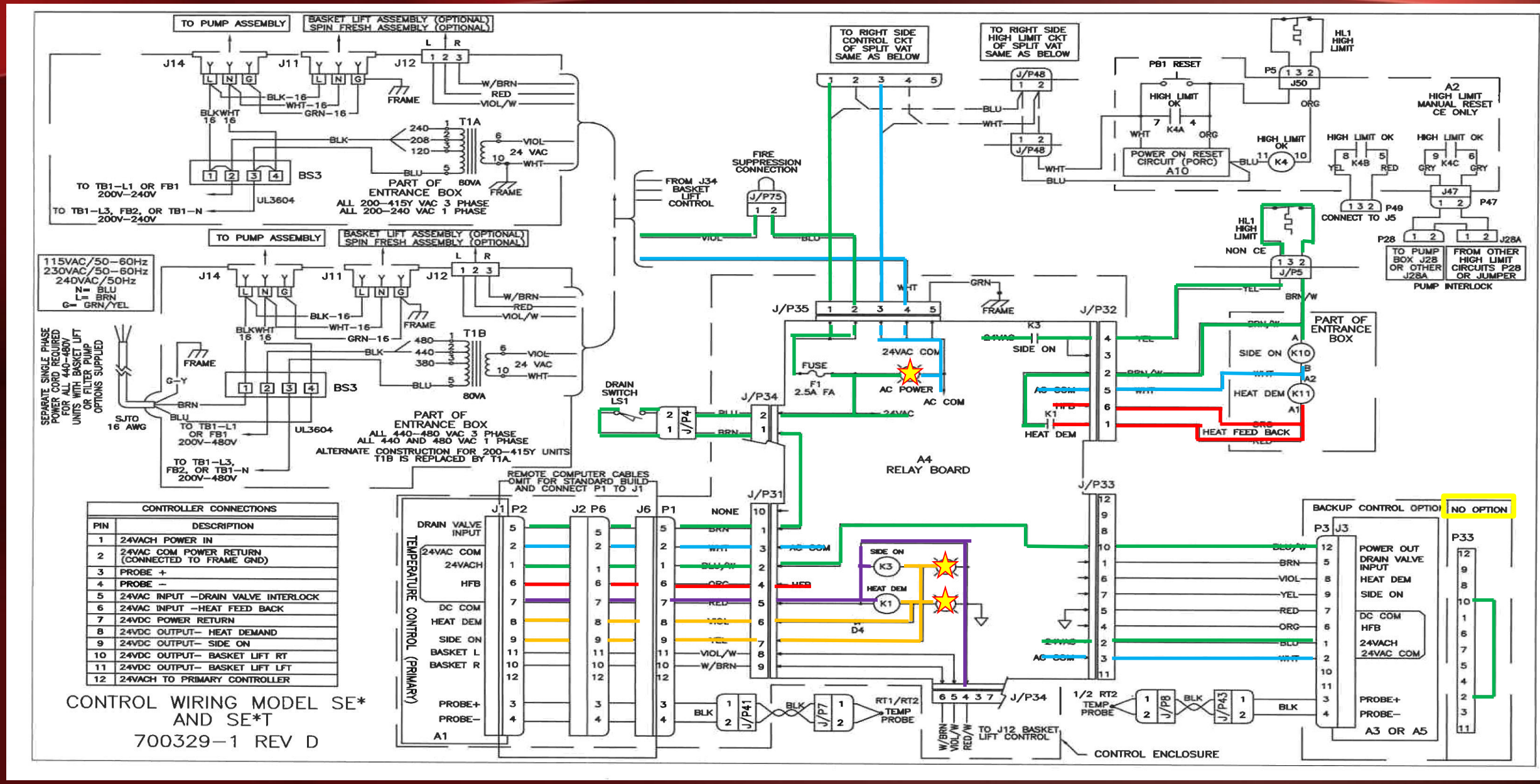
WIRING THEORY OF OPERATION



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